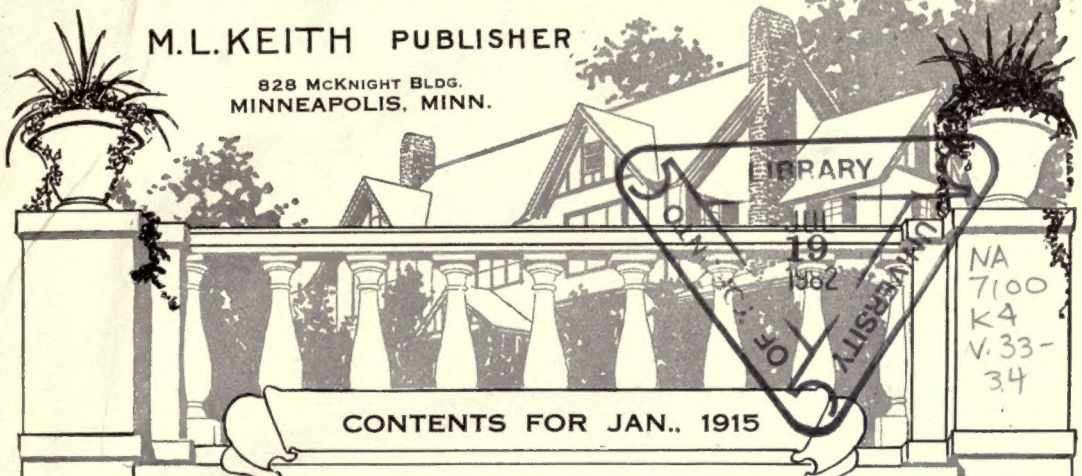
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KEITH'S MAGAZINE ON HOME BUILDING

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A rustic hillside home set well among the pines.

KEITH'S MAGAZINE

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A Well-Planned Modern Farm House

E. I. Farrington

UNTIL a few years ago most farm houses were built to conform to one of two or three familiar types. The New England type was represented by a square frame house, two stories high and bisected by a wide hall. Pennsylvania had, and of course still has, its oblong farm house made of stone; and all over the country are scattered plain farm cottages with roof sloping toward the street and devoid of any frills in the form of porches, gables or bay windows. In all these types compactness is a dominant note and an important consideration is easy heating by means of fireplace or stoves.

Now, however, farmers are departing from old lines when they plan their houses and much greater variety is to be found in country homes. It is an unfortunate fact, though, that in many instances the plans adopted are those origi-



The home of Mr. Geo. Albree, Concord, Mass. Designed to meet the special requirements of his farm and embodying all the modern conveniences of a city house.

nally drawn for a city or suburban dwelling and by no means as well adapted to conditions of country living as they ought to be for comfort and convenience.

The house illustrated is thoroughly modern in design and arrangement but it would be difficult to find a house better suited to the needs of the average farmer's family. The living room is large and well separated from the rest of the house. The dining room is large, too, and is to be reached from front or back without passing through any other room but the kitchen. A large dining room is often necessary; the owner of this house, Mr. George Albree, of Concord, Mass., has had as many as twelve hired men to feed at one time. When the family is small, one end is used as a sitting room or office.

The service quarters are ideal. The kitchen, which is eighteen feet square, has windows on two sides and is equipped with a range, sanitary sink and set tubs. Over the range is a large Russia iron hood with a ventilator above and below. This is a valuable feature when many men are to be cooked for, as most of the odor and much of the heat is carried up the chimney. The walls back of the sink and the set tubs are faced with brick, in order that they may easily be kept clean. Connected with the kitchen is a pantry and a china closet. The dining room is reached through the latter, which is an excellent arrangement because the kitchen noises are excluded from the rest of the house. There is a small sink under a window in the china closet which is used for washing the table ware and by means of which many steps are saved. The dishes are kept behind glass doors and there are drawers for table linen.



A view into the dining room from entrance hall.

Directly back of the kitchen and reached by a separate door at the rear of the house is a work room where tools may be sharpened and various odd jobs done. If there are hired men, they come into the house through this room, where they leave their muddy boots and work clothing. A bath room for the help is located just above on the second floor and is reached by stairs leading from this work room. An arrangement of this kind is a great help to the housekeeper, for it greatly reduces the amount of house cleaning to be done. Some farmers would doubtless use this room as a work shop.

There are five chambers on the second floor. The middle chamber, which is the owner's room, is so arranged that most of the farm may be seen from its windows. There are windows front and back and a part of the lower story was cut away over the kitchen in order to allow space for one large side window. Through this window the owner gets an unbroken view of the front doors of his barn simply by raising himself on his elbow in bed, and as there is an electric light in front of the barn he is able to see in a moment if anything is wrong. This room has a large fireplace and is very attractive and airy. One door leads into the front hall and another into the back hall. If the owner is wearing soiled working clothes, he naturally uses the back stairs.



The spacious living room.

A man and a maid's room lead from the rear hall and in each room there is a commodious closet. There is also a large closet in the hall itself, with shelves above and drawers below. Just across the hall from these two chambers the extra bathroom already mentioned is located. As

will be noticed, what may be called the service portion of the house is kept entirely separate from the family's quarters but in an unobtrusive way and without interfering with the convenient arrangement of the house. The two chambers remaining are reached from the front hall and each has a pretty little corner fireplace, the owner having a fondness for decorative features of this kind. All in all, there are five fireplaces in the house and they are built to be used, too, although they are not needed for heat.

The interior finish of the parlor, dining room and front hall is English oak, in its natural color. The walls are papered and both parlor and dining room have large brick fireplaces. These rooms are separated from the hall by wide doorways in which portieres are hung. White wood is used on the second floor and all the trim in the bedrooms is white. The bath room is finished in white and green. The kitchen and some of the other service quarters have stained or painted walls.

This house faces the south and is protected on the north by an elevation known as Revolutionary Ridge. Its location is historic, for Concord had a prominent place in the Revolutionary war and afterwards such famous men as Emerson, Hawthorne, Alcott and Thoreau came to live in that neighborhood. Thoreau has written delightfully of the very view which Mr. Albree is able to enjoy from his front windows.

Like most farm houses, the one being described is exposed to the weather on all sides, although the elevation at the rear helps to break the force of the wind. Probably an ordinary furnace would not be sufficient for heating the house but a combination system gives perfect satisfaction. Each room has a register, and pipes carrying water heated by a coil in the furnace pot supply radiators placed wherever additional heat seems needed. No difficulty in heating the entire house with this system is experienced. The chimney at the kitchen end carries the furnace, range, dining room fireplace and two ventilating flues. The other chimney serves the parlor fireplace and those in two of the chambers.

This house presents a very attractive exterior appearance and the cost of keeping it looking well is very small. As the illustration shows, it is shingled all over, the shingles having been allowed to weather. The only paint used was to make the door and window trims white and the blinds green. The grouping of the windows is interesting and helps to give character to the house. The comfortable porch is so arranged that it is shaded in the afternoon and it commands a beautiful view. A shingle house of this character is particularly well adapted to the country. It is not obtrusive and harmonizes nicely with the landscape. The illustration used is from a photograph which was made before much planting had been done. Now the base line is hidden by great clumps of California privet allowed to grow in its natural form, with several varieties of low growing spirea in front and the general appearance of the grounds has been greatly improved.

The house is very substantially built, with two by twelve floor timbers. The cellar is cemented and partitioned off for vegetable storage at one end. It is also plastered and the ceiling over the furnace is covered with asbestos. In a farming section it is especially important to take every precaution against fire. The house is wired for electricity throughout, the current being obtained from the town. The owner of the house, Mr. Albree, estimates that it could be reproduced for about $7,500, after eliminating some of the features which were incorporated into the original house but which are not absolutely essential and yet added considerable to the cost.

Cobbleshack

Virginia Shortridge

ONE is tempted to believe that all the stones in New England were certainly obsessed by a desire to move on and down towards the South, and that centuries ago they managed to travel as far as the beautiful state of Connecticut, and there, being dreary, laid themselves down for time and the good brown earth to cover them over with a blanket. Many of them rested well until the owner of Cobbleshack began stirring them out of their coveys to build Cobbleshack and all its farm buildings.

No one knows how seldom this was done in Connecticut in the early days, and so from the first start great interest was shown in all the stages of its development.

Professor William H. Burr was a pioneer in the part of the country around Stamford, in the matter of building a house out of stones taken from fields and fences. Before this the farmers let them lie and ploughed over them, or else took them up in a desultory fashion and threw them against the stone walls. Now Cobbleshack Farm is in a large measure fireproof in all of its buildings, and has even reinforced concrete floors in the main house on the first floor.

This building crowns the hilltop, and fertile fields with their golden grain cover the landscape almost as far as the eye can reach, a wonderful exponent of what scientific methods have done towards redeeming an abandoned farm.



The approach.

The barns and farm buildings are placed on the sharper slope of the hill, and are obscured by the gardener's cottage and the main barn; which are, of course, all of stone.

By such clever placing, little planting was needed to give the seclusion required for the four-legged members, and the chickens and ducks, belonging to the farm family.



Cobbleshack from the garden side.

Cobbleshack



A cool resting place on a hot afternoon or evening.



The living room with glimpse of hall thru arched opening.

Views



A view from the music room into the delightful, sunny dining room.



Crowning the hill, this "adapted colonial" is well placed for both appearance and utility.

The house, "adapted Colonial," is very interesting. The front door is decorated by an old knocker, taken from an ancestor's door, worn somewhat smooth and shiny by constant friction applied faithfully by many days of polishing to a high lustre.

One enters under the porte-cochère, and, after mounting several steps, one is in the cool, shaded, front hall. An arch is over the entrance to the living room, making a clear-cut line of white wood in sharp contrast to the walls of deep colonial yellow.

A music room with book shelves carried up to the ceiling, and with French doors leading on to the brick-floored piazza, is passed through on the way to the dining room.

From the music room one can also pass into the new wing which was added a short time ago, and which includes butler's pantry, great kitchen, laundry, large pantry, and a writing office room for transacting matters pertaining to the farm.

The woodwork is very beautiful, being simple in design but very colonial, white wood, painted many coats of paint. The windows are large, recessed and have generous window sills.

There are four bedrooms and three baths on the second floor, and several more with a bath on the third floor. The maids' part is in the new wing and completely separated.

Floors are covered with rugs of brown tone, harmonizing with the walls of yellow, and the pretty curtains of tan, made with valences.

With chairs in the dining room, which have been one hundred and seventy-five years in this family, and other lovely family pieces, old but younger than the chairs, the mellowness and charm are very evident to all who are fortunate enough to step within.

There are solid shutters at all the windows, including even those in the cellar. These latter are a great protection from rain and bad weather and one seldom sees them used on the cellar windows in modern houses.

They also make the house delightfully cool and dark, making it practical and possible to go without window screens in a land where "flies fly."

Cobbleshack is in many details a copy of one in Watertown in which the owner lived as a little boy, and the architect who so successfully combined the old and the new is Mr. Edward Pearce Casey of New York.

Decorative Wall Paneling

Arthur E. Gleed

INTERIOR decoration by means of wood paneling was in its prime in the stately and substantial Tudor period, and the practice of lining walls and ceiling with polished oak panels enclosed by hand made moldings was the accepted method of finishing all rooms. Times and manners changed, and the somewhat gloomy oak gave way to plaster panels decorated with delicate coloring and gilding. Today, with its rapid changes and democratic art, we build it a lighter style and our rooms are usually left with but plain plastered walls and that remnant of the paneling of olden days, the skirting board.

The present day has, however, its advantage, for never was there such a number of excellent ways of decorating our walls and never were there such opportunities of getting charming interiors at so low a cost. We can, if we wish, overlay our walls with polished oak, but this is beyond the means of most of us and perhaps not entirely suited to modern taste, and it will be found possible to adapt present day methods to the form of light wood paneling which will be quite inexpensive and at the same time pleasingly suitable for our everyday life.

Paneling has a powerful effect in accentuating any pattern we apply to a wall, and so makes it unnecessary to add much in the way of decoration, which consequently should lower the cost. By keeping the panels light in construction it can be made to add dignity to even a small room. In conjunction with painted surfaces, stenciling, and printed wall paper, it is capable of endless variation, making it suitable for the delicate atmosphere desirable in a boudoir or the more formal and substantial effect looked for in a dining room or a reception hall.



A simple treatment that could be carried out in any dining room.

A dining room whose chief decoration was a fine collection of pictures and pottery of Dutch

origin had the paneling arranged to show these to advantage. The plate shelf was placed six feet from the floor and below it were panels twelve inches square.

These were filled by Dutch landscape decorations skilfully painted in. A similar decoration could be cut from a Dutch wall paper at much less expense. The scheme of coloring used was gray-blue for the panel spaces with the landscape border in various shades of blue and gray. The upper wall and ceiling were tinted deep ivory white, and the woodwork a dead black; a dark shade of bronze green could be substituted if preferred. The large, plain panels had been given a serviceable finish of flat-toned oil paint over a sand-finished plaster. The same scheme might be carried out in a blue-gray burlap, if desired. With the paneling constructed of oak and stained and waxed to a mellow surface, the effect was very rich against the blue-gray background, and the spaces for the pictures prevented any undue crowding of them—a condition to be carefully avoided in any room.



Paneling lends itself well to the delicate treatments necessary in the boudoir.

In the drawing room wall illustrated, the landscape border is the principal decoration, and this is placed five feet from the floor, that it may be well on the line of sight.

The shelf above it is intended for small pictures, such as water-color drawings, engravings, and photographs, and also any fine pottery which would be suitable in a drawing room. The uprights which divide the panels taper slightly towards the top, giving them the appearance of pilasters, which support the shelf, and also add lightness to the structure. The coloring is a harmony of pale dull blues and greens. The upper part of the walls above the shelf is tinted a light blue-green, the large plain panels below are colored with a delicate warm green, the landscape border combines various shades of dull blue and green, and the woodwork is painted ivory white with a dull surface. The choice of coloring is most important, for with such large surfaces it is quite necessary to have the tones very subdued, and it would be advisable in mixing the colors to use a pale gray as a base, adding the blue and green in small quantities until the desired shades were produced.

The landscape border could be either painted or stenciled. If neither of these methods were available a good wall paper

(*Continued on page 45.*)

The Farmer's Wife Gets a New House

Henrietta P. Keith

YES, the farmer's wife is going to have a new house. She means to have it a pretty one too, and pleasant and commodious, with sleeping rooms and a real bath room upstairs. It is to be a pretty house too, with a lawn and flower-bordered walks and even a pergola.

The potato patch and the pigs are not coming right up to the door any longer. She will have a barberry hedge, or a tall wire netting trellis with sweet peas covering it, screening there *nord* utilities from view with their pink loveliness. She plans to have water piped into the house and sewerage piped away from it. If she can't have a laundry in the basement, she intends to put stationary, zinc-lined tubs in an enclosed extension of the back porch, where there will be an extra toilet also.

She will have the kitchen floor painted, and a great square of linoleum in the center, so her strength won't all go to scrubbing. Her kitchen walls will be painted a pretty blue or buff, and there will be white muslin curtains with *shades* at the windows which will be fitted with wire screens to keep out flies and mosquitoes. There will be a gas range too, to take the place of the old wood range that made such drudgery lugging in wood, coal or cobs and carrying out ashes, besides roasting the farmer's wife and daughters.

Why shouldn't she? The farmer has money enough to pay for it. His thrifty, hardworking wife, has worked just as hard as he has to save that money and get ahead. She has risen at four in the morning and gone to bed long after the farmer, because the late evening hours were the only time she had to mend stockings, patch overalls or make a new frock

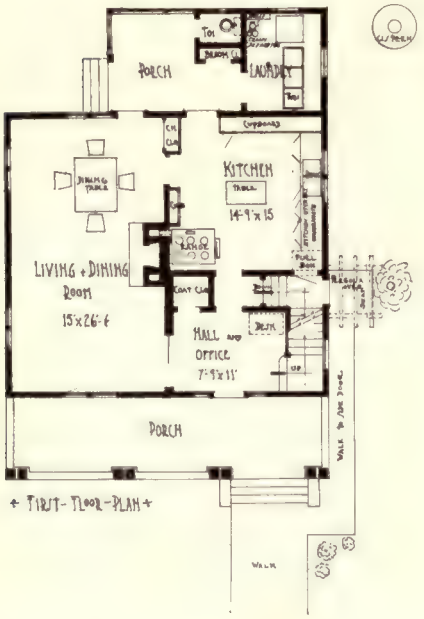


The countryside feeling in harmony with rural surroundings—yet, not lacking in dignity.

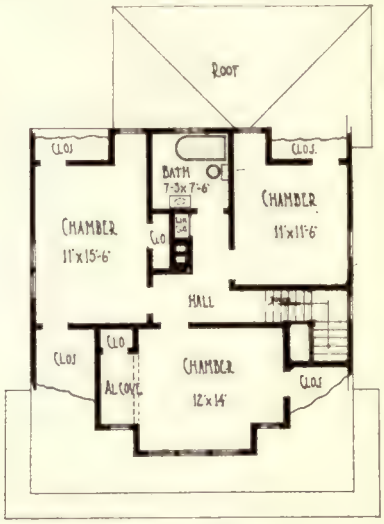
for Alice. She has lugged wood from that shed twenty feet away, and water from the well for twenty years. The farmer thinks the wood is "handy." Let him try it himself, carrying in a dozen or two armfuls a day.

The ordinary farmer is a curiously conservative being. We may say he is "sot in his ways." He calls any deviation from the old accustomed ways, "nonsense," and refuses any "new fangled notions." That is—in the women's department. New ideas in reapers and binders are all right, and he has the latest and most up-to-date farm machinery. He has just built a fine new barn too, and the horses are better housed than his wife. He thinks he has done his whole duty by "Mari' and the girls," if they have got an "orgin" in the little stuffy "parlor," and he says "wimmin folks hadn't orter meddle."

But women are going to meddle, my astonished friend, and you will be better off for it. Improved housing will pay in dollars and cents, as well as in looks. It will pay, because the improved sanitation in the houses and around it will dispense with the doctor and the drug bill. Country people, in spite of their outdoor life, abundant exercise and absence of city dissipations, are not more healthy than city people. That is, the men may be, because they are out of doors, and when their work is done they can go to bed and sleep undisturbed. But the women are often half dead. To say nothing of the fearful prevalence of insanity among them—and no wonder, for they are not only overworked, but their surroundings are depressing—they are lonely. Pleasant homes, convenient arrangements, would help a great deal. No wonder there is malaria, and quinine by the quart, when the slops are just thrown out the back door. No wonder the boy won't stay on the farm, and the girls "take a place" in town, so long as country life is destitute of all the comforts and conveniences to be had in the city, to say nothing of recreations and amusements. Just as long as these conditions prevail, it is of no use for social economists to preach that "the hope of the future lies in the



+ FIRST-FLOOR-PLAN +



+ SECOND-FLOOR-PLAN +

return of the people to the soil."

The ambitious young men and young women will continue to get away from the dead level of monotony and ugliness, just as fast as they can. So it is well that the farmer's wife is waking up. The new house, carefully planned, and tastefully fitted up, will put new heart into the women folk, besides relieving them of useless drudgery. Necessary hardship and economy is one thing; but there is no virtue or common sense in eating wormy apples from the north side of the orchard, while ripe, mellow fruit is going to waste elsewhere. By the same token, a woman is only foolish, and *not* worthy of great praise, when she submits year after year to live in an unpainted, ugly shanty of a house, with a kitchen and a lean-to, the table black with flies and no working conveniences where there is money enough to get something better. What ambition can she have to get up nice, appetizing meals, in a cluttered-up place like that, or to make herself tidy and attractive in a clean blue and white calico, with a pink bow perked up in her hair? Wouldn't a fresh, pretty room, with ruffled curtains at the windows, with a clean cloth on the table and a bunch of flowers, to say nothing of a well-cooked meal, instead of the regulation fried ham and potatoes, be a pleasant change, and wouldn't the farmer like the looks of it, when he comes in hot and tired from haying?



A fetching little pergola over the side entrance.

He would, and he would not only wash his own face and hands but brush his hair and put a cool linen coat over his wilted shirt. Don't say you haven't got time for such rails. You have just as much time as other people; and it makes the difference between pigs and people.

The possibilities of charm and of comfort in farm homes, are just beginning to dawn upon the farmer's wife. Like the great American nation, she stands things a long time without a fuss. But also, when they do make up their minds, things have to move.

Even the U. S. Government, occupied as it is with weighty affairs of state, has through its Department of Agriculture, published the first of a series of farm houses designed to provide more attractive and comfortable houses at a mimimum cost, for this large and important class of its people. This first design has appeared in a number of publications, and while interesting and not devoid of attractiveness, must be confessed to have rather a summer cottage aspect with hardly character enough for a permanent home. We have observed that when the farmer does build a new house, he builds a pretty good one—at least the modern farmer does. Time was, when the country carpenter was told the number of rooms wanted and allowed to put them together any old way. But the farmer has learned that it pays to have plans, and good ones. It not only pays in getting a better and handsomer house, but it pays in building it, to have a good set of plans and specifications, so that the builder or carpenter does not have to stop and figure

it out as he goes along, or spend time and money rectifying mistakes, because he has it all plainly figured out for him from the start.

To illustrate our point, we have shown here the plans and front elevation for a most attractive and convenient farm house, such a house as could be built by any average well-to-do farmer. It is sympathetically designed, that is, it has the countryside feeling in harmony with rural surroundings—yet does not lack dignity, and for a small house is as full of modern comfort and convenience as any city home. At the same time it is eminently practical. Just look over the plan and see how everything has been thought of and figured out. There is a roomy entrance hall, large enough so the farmer could have an office desk in the angle of the stairs, for a sort of business headquarters that would not encroach upon the domestic privacy; there is a big coat closet too, and a convenient stairway down to the basement.

The big living room 15x26 ft. 6 in. has a great fireplace centered in it, with the further end arranged for dining room use, the idea being to utilize the table in the evenings for other purposes. From this dining room end you not only pass directly through to a commodious and most conveniently equipped kitchen, but out upon a rear, enclosed porch, with access to a toilet and lavatory in the laundry. Here the farmer can come in from the field and "slick up" for supper; and after supper there is the long, cool, screened veranda across the front for him to rest in. As to the rear porch, it is large enough to do much of the kitchen work out there in summer, and so keep the house cooler. If a wood or coal range must be used instead of gas, a most convenient fuel bin has been provided at one side of the cupboard for cooking utensils —which fills from outside the house.

Of course there would be a pneumatic water engine, to supply water for the kitchen, the laundry and the bath, and of course there would be a gas machine of some kind—there are now several good ones—to do away with kerosene lamps and candles.

Last, but not least, study the attractive exterior, with the arrangement for walks and shrubbery, and extension of the front walk carried round to the side entrance in a neat, trim orderliness ending in a fetching little pergola containing a vine-covered seat, at the entrance itself.

Does the farmer *pooh* at these refinements and say he can't afford such nonsense? Then let him not wonder nor complain if his boys and girls fly to the cities just as soon as they can. There is no one who can afford it better than the farmer.

"The strength of this mighty nation
Is not in the palace grand,
But in the houses of the farmer
Who gathers wealth from the land."

Good buildings on his farm—and by that we don't mean only *barns*—are just as much an indication of a farmer's success as good crops and money in the bank. What good is money in the bank? Turn a reasonable part of it into comfort and pleasantness for the farmer's wife and children, and see if it doesn't pay good dividends.

Estimate of Cost.

Excavating	$45.00
Mason work	205.00
Cement floors	45.00
Chimney and brick work	175.00
Lumber	600.00
Millwork	650.00
Interior plaster	360.00
Painting	225.00
Carpenter labor	510.00
Hardware	220.00
Electric wiring	45.00
Galvanized iron and tin work	70.00
Heating—hot air	150.00
Plumbing	300.00
Miscellaneous	50.00
Architect's fee	50.00
Total	$3,700.00



"Homes We Have Built" Series

A Home in the Blue Grass Country

R. H. McKee

IF you owned a lot that was eighty feet by two hundred and fifty deep, with a smooth stretch of lawn and a border of fine big maple trees, wouldn't it inspire you to build a bungalow? It did us, for a low, rambling structure seemed to "fit" such a setting as no other type of house would.

There is a great abundance of field stone in our locality, so we used it for the foundation, porch pillars and chimney. The irregular shapes set in concrete give a very pleasing effect and the colors blend beautifully with the shingles of the walls, which we stained a soft brown.

A porch? Of course; that is always part of the "lure of the bungalow," and ours is the wide, inviting kind that extends all the way around one side of the house. The floor is of concrete and the pillars are built up a little distance with stone capped with concrete and supporting plain, square columns of ivory white, like the trim.

The most striking features of the exterior are the roof with its long, sloping lines and overhanging eaves, and the huge stone chimney that some of the natives think is "mighty pooh-folksy." We used moss-green, granite shingles for the roof on account of fire resisting qualities, and the color effect is very harmonious. A sleeping balcony on the south side over the porch is a delightful feature of our house. From the porch you enter the living room which seems quite spacious as the dining room is separated from it only by a post and panel construction. The cen-



The huge stone chimney that some of the natives think is "mighty Pooh-Folsky."

tral feature of the living-room is the inglenook with its immense stone fireplace, broad hearth, inviting seats and book shelves on either side. The nook is enclosed with a post and panel construction similar to the opening into the dining-room. Both of these rooms are paneled to a height of five and a half feet in oak, finished in Early English; the floors are hardwood in natural finish.

The windows are grouped at one end of the living-room and under them is a built-in sea, covering a radiator; at each end of the seat is a built-in bookcase. In the dining room, the windows are grouped in the same way, and under them is a built-in buffet, which, with a china closet at each end, covers the whole side of the room. The finish in these two rooms is Early English, finished flat. The walls are russett flat tone, and the ceiling, cream. Black iron Craftsman lanterns with amber glass harmonize with the general color scheme.



The dining room.

A swinging door leads from the dining-room to the kitchen, which is small but very convenient. It is finished in white enamel, with built-in bins, table and cupboards. Over the sink and drainboard is a dish cupboard with glass doors. Instead of an entry there is a screened porch the length of kitchen and bath-room.

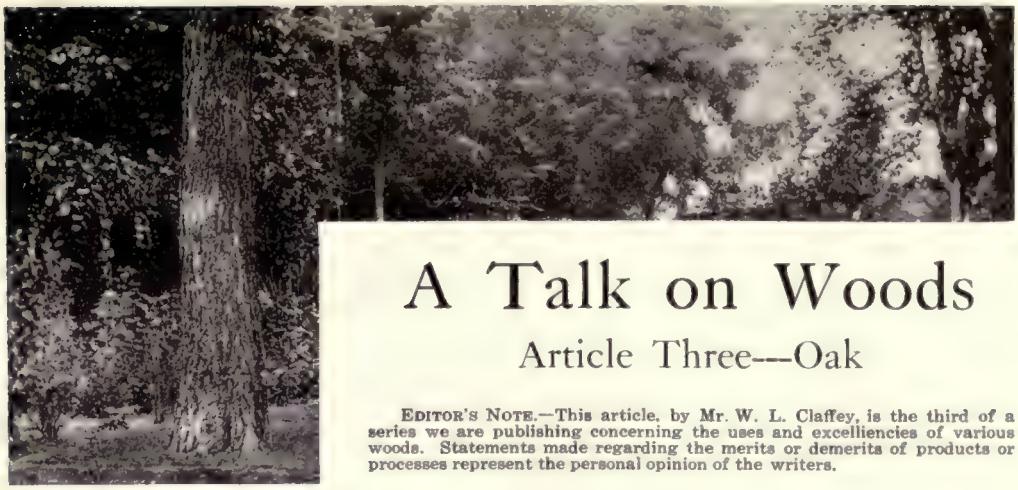
A narrow hall separates the bed-rooms from the rest of the house. These two rooms have white enameled woodwork and walls of flat tone paint; one is French grey with ivory ceiling; the other pale blue with ivory ceiling. Seats built under the windows forming skirt boxes, and large closets are good features of the bed-rooms. The bath at the end of the hall, easily accessible to the bed-rooms, is finished entirely in white.

The stairs lead up from this hall and an opening similar to a window serves the double purpose of seeming to add to the width of the hall and the stairs, and provides a place for the brass lantern which lights the hall and stairway. Two rooms and a small hall were finished upstairs. Wallboard, paneled with wooden strips, was used for the upstairs instead of plaster. From the south room a glass door leads out upon the sleeping porch, which is sheltered by the overhanging eaves of the roof. The basement under the kitchen and bath is walled and floored with concrete. Here we have ample room for a boiler for our hot water heating plant, pressure tank for water system, storage for coal, etc. Throughout the house we have utilized every inch of space.



The inglenook with its immense stone fireplace, broad hearth, inviting seats and book-shelves on either side.

All in all, we are pretty well satisfied with our home in the blue grass country.



A Talk on Woods

Article Three---Oak

EDITOR'S NOTE.—This article, by Mr. W. L. Claffey, is the third of a series we are publishing concerning the uses and excelliencies of various woods. Statements made regarding the merits or demerits of products or processes represent the personal opinion of the writers.

OF all American hardwoods, probably the one most adaptable to the uses of the homebuilder is oak. Beauty, quality, distinctiveness and durability, the prime requisites of our American hardwood are all found in oak in the highest degree and it rightly merits its extreme popularity.

Oak trees are separated into fifty to sixty species in the United States. Botonists disagree among themselves as to the right number. Foresters and manufacturers of oak lumber, divide all the oaks into two distinctive and commercial groups; the white oak (quercus alba) and the red oak (quercus rubra). The red oak requires two years to mature its acorns and the white oak but one year. The wood of the two groups are structurally different. In physical structure, the white oak is closer grained and harder than the red oak.



Ballroom in the Palace Hotel, San Francisco, floored with clear quartered oak squares.

Woodworkers and lumber manufacturers usually determine the color of the wood before the log is cut up. It often happens that the color is decided upon by the bark, rather than by the wood itself.

While the oak is separated commercially into two colors, white and red, it is also segregated into quarter-sawed and plain-sawed. The plain-sawed stock is obtained by straight cutting and the quarter-sawed is obtained by sawing logs into four quarters, then sawing boards at right angles to the annual rings of growth. This makes the beautiful flashy effect.

The oak tree ranges in height from 60 ft. to 100 ft. and in diameter 1ft. to 6 ft. The location of growth is from southern Maine to southwestern Quebec to Central and southern Ontario, the lower peninsula of Michingan, southern Wisconsin and southern Minnesota and to southern Nebraska and southern Kansas and the Southern States. At this writing there is more oak stumpage, meaning standing oak timber, in the state of Arkansas than in any one state in the United States. Of all the hardwoods, oak leads from the viewpoint of lumber production.



White oak tree.

The wood of practically all the oaks is tough, strong, hard and heavy, with the characteristic plain and quartered figure, which has always made oak a standard cabinet, furniture, finish and flooring wood, in addition to its many uses where strength and beauty of grain is essential. Without regard to the many different species of oak, the manufacturing uses of oak are herewith summarized:

Manufacturing Uses of Oak.

PURPOSE	PER CENT
Furniture and fixtures	32
Millwork, including oak flooring,	25
Car construction	15
Vehicles	11
Agricultural implements	3
Boxes and crates	3
Ship and boat building	2
Refrigerators and kitchen cabinets	2
Musical instruments	1
Sewing machines	1
Other uses	5
Total	100

If you are reading this article in your home, all you need do is look around the room and you will inare oak, your living room table, desk, finish and picture frames oak also. If you variably find that your floors have any knowledge whatever of the different varieties of woods, you will quickly recognize oak, which is usually left showing its natural, beautiful figure and color. For flooring purposes it is classified as America's best flooring. It is the floor that the woman of today demands on account of its rich and cheerful color and the friendly atmosphere it creates. Then again an oak floor requires less care than the so-called mahogany, that is birch mahoganized, or other hardwood flooring on the market. As an illustration, a birch mahoganized floor or furniture shows up every speck of dust and scratches whereas the oak floor, due to its color, will not parade the dust or show the scratches.



Red oak tree.

The writer of this article is using a mahogany desk on the eighth floor of an office building which requires dusting at least two times a day. In the same office is a golden oak desk that does not show the dust nearly as much and only requires dusting once in two days.

By right of superior merit oak when made into a finish or flooring is superior to other hardwoods. A home floored with oak flooring or finished in oak, commands a better selling price and better rentals, besides attracting a better class of tenants.

Interior Studies

(Study No. 1.) A beautifully appointed dining room in a modern city home. Rugs, furnishings and wall and ceiling treatments all harmonize to present a very pleasing picture.

(Study No. 2.) The multiplicity of small things in this large country house living room is rather confusing and unpleasant. A few good pieces well placed would make a much better appearance.

(Study No. 3.) The living room of a modest suburban cottage which would be more livable if the selection of decorations and furnishings had been studied with greater care.



(Study No. 1.)



(Study No. 2.)



(Study No. 3)

Home Grounds and Gardens



A Garden That Means Something



Elizabeth Griswold Rowe

(Next month an interesting sketch will be presented by Mr. Phelps Wyman, Landscape Architect)

IT was last year that I started my garden. Our lot was fairly large and sunny and, in California, it is so seay to make things grow. Of course, I enjoyed planning our new house, but I never pictured it in my mind without a fringe of green running four or five feet up from the foundation, some flowering shrubs peeping around the corner, and a few vines climbing over porch and chimney.

It was autumn when we moved in. I had taken pains to send for several catalogues of flowering shrubs and hardy plants. It is all very well to plant seeds every year and depend on them for a garden when you do not feel settled. But this was to be our permanent home and I intended to fill my garden with plants and roots that look to the future.

Some of the larger firms send out very attractive, illustrated books advertising their productions. They really are fascinating to read. One evening as I sat surrounded by these catalogues making out lists and having a most delightful time, my husband asked:

"Don't you admire Mr. Brown's garden? It was laid out by a landscape gardener."

"It is all right for them," I answered, "and suits their place. The Brown garden is mostly cement walls and terraces with symmetrical borders that don't invite you to pick a flower or take off a slip for your neighbor. But I want our garden to mean something."

And so I have carried out my idea. I have a lilac bush that is an offspring of one from my birthplace and I hope it will smell as sweet to me as it used to some—well, some years ago. In the background of my hardy border is a bridal wreath and a syringa from the New Jersey home of my husband's grandfather. A clump of peonies that have been growing for years in Michigan soil were divided to start a new cluster in a California garden, and the bulbs that went into my wonderful iris bed were given to me for Christmas presents.

I planned my hardy border myself and kept it in green and pink and white with some flowers that shade into rose. There was a background already of young, fine-leaved trees—my neighbor had planted them along the fence to the north. I planned to have the border about six feet wide curving in front of a brick terrace that is built out on one side of the house. In the background, I planted mock-orange or syringa, pink and white hawthorns, azaleas, a snowball, a Japanese rose and a smoke-tree. In front of these went deutzias, spireas, hydrangeas with fox-gloves here and there. Next the grass is a thick, compact edging of Shasta daisies—a bit of my old two-by-four garden transplant-

ed to the new. Here in California they grow so thriftily that the roots can be separated every year and passed on to the neighbors. For three months they make a bright gold and white band that is beautiful against the surrounding greens.

The walk is on one side of the yard next the drive-way, so immediately in front of the house is a smooth, gently-terraced lawn, but on the corner next the driveway I have put my group of birches. They are three in number and can anyone tell me why they are always planted in threes? In our family there are three members and each of us planted and named a tree—another bit of sentiment. Let a child set out a tree for himself and won't he enjoy looking at it in after years when it spreads great branches over him and saying, "I planted that tree myself, when I was ten years old."

In driving through the grounds of the late Senator Stanford, I remember to have seen a number of trees that were interesting because they had been planted by U. S. Grant and other famous personages.

Here in California when Chinese New Year comes around, if you have a Chinese working for you or bringing you vegetables, you will always get a present of a Chinese lily rooted and budded ready to blossom out in water. It is a pretty custom and one worth copying. Any garden lover would be delighted to receive a choice rose or a new plant to put into her garden as a birthday or any other anniversary present, and the beauty of such a gift is that it improves as time goes by.



A corner of the garden.

A Cement Bungalow for a Narrow Lot

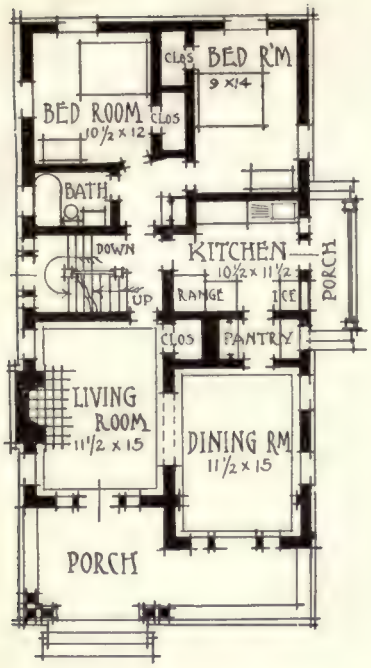
IN planning a home that is to be built on a narrow lot, there are many problems to meet which are not encountered where there are no confining restrictions to the ground plan. If the owner wishes a reception hall it must always go to the side in a house less than 24 ft. wide, but under these conditions it is much better to plan for direct entrance into living room.

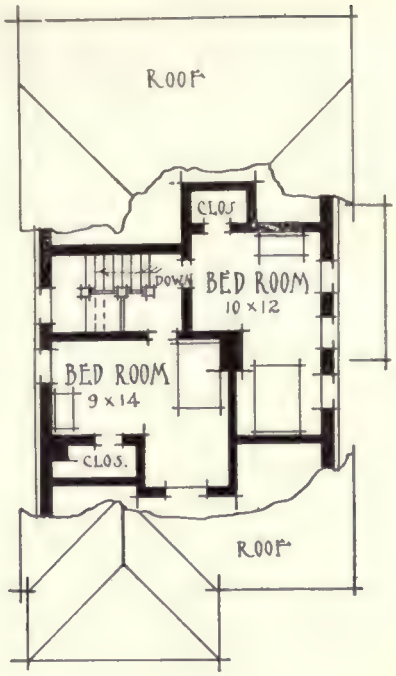


"It is difficult to adequately describe the beauty and artistic merit of this bungalow without overworking the superlatives."—*John Henry Newson, Architect.*

One of our frequent contributors among the well known architects, Mr. John Henry Newson, gives us an excellent solution of the narrow lot problem in his design for "A Cement Bungalow." He states that "it is difficult to adequately describe the beauty and artistic merit of this bungalow without 'overworking the superlatives.'" The reproduction speaks for itself and a technical description is more enlightening. The exterior is cement on hollow tile, water-proofed and cream white in color. Trimmings and all woodwork are stained brown and window sash painted cream white. The roof is slated, but shingles stained gray, green or brown would be equally effective and if the expense of a tile roof can be borne, the bungalow would be very striking in appearance. The foundation and porch parapet walls are of red brick laid up in white mortar.

The living room and dining room have light on two sides and a large closet is provided off the living room for coats and wraps. A pantry connects dining room and kitchen, both of which are arranged with ample cupboards. The refrigerator is wide and low and arranged to be iced from the outside. Two bedrooms and a bath room on the first story and two bedrooms on the second or attic story with large linen closets, etc., makes a most complete house.





The Floor Plans of the Cement Bungalow

A Brick Bungalow for a Wide Lot

Quite opposite both as to the plan and style of architecture to the foregoing, is our next contribution as illustrated by a photograph view of Mr. Scott's new brick bungalow. This delightful home was built early in 1913 in Chaska, Minn., a busy little milling town. The owner had a beautiful building site with a corner frontage of 150 feet, which accommodates so nicely this type of residence with wide sweeping porch curving in graceful lines and extending back on one side some fifteen feet. The roof is treated as a broad gable running through from front to rear, broken in the middle by side gables which provide for two well lighted chambers. The front bedroom is a beauty, twenty feet long. At the rear is a commodious bath room and projected over the side porch is a wide dormer enclosing sleeping porch.

The ground plan is certainly well arranged with generous sized rooms. The columned opening in front gives just the required separation of ingle nook feature from the living room without disturbing the plan for a large living room. The fine bedroom with wide bay has private connection to bath on this floor. The kitchen is splendidly arranged with adjoining pantry, secured within the house proper and not projected as is so frequently the case by an awkward jut to the wall line.

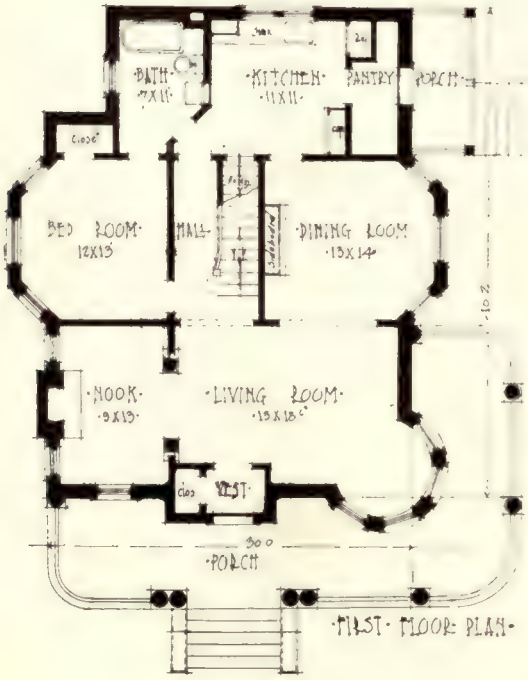
In construction the basement walls are of concrete. Above grade they are cemented over and left as rough cast work. The porch underfill and floors are all cement. The exterior walls of the first

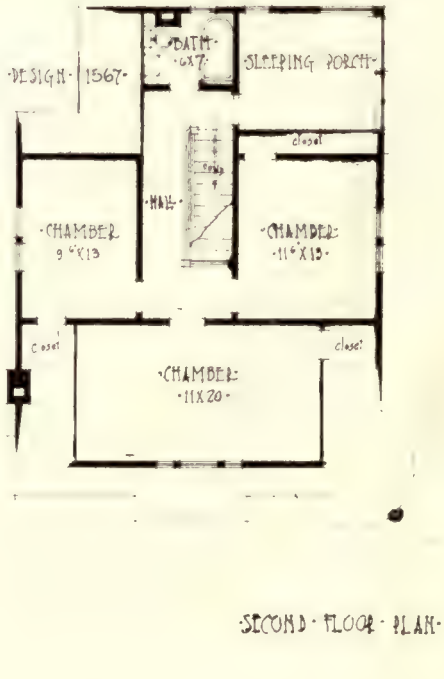


The owner had a beautiful corner lot which so nicely accommodates this type of residence.—*Keith & Purdy, Architects.*

story are brick with an oriental brick facing laid up in chocolate colored mortar.

The floors and finish on the first floor are of oak, while the kitchen and second story is finished in pine with pine floors. The bath has a tile floor and wainscot.





A Commodious $4,000 Cottage

One of the representative architects of the Northwest, Mr. C. S. Sedgwick, gives an interesting study in the cottage form of building, which, as I have previously commented, is the most economical type for the same number of rooms. In this form of building, you accomplish the largest amount of floor space at the lowest possible cost and for a medium sized dwelling, the cottage design generally looks the best and is the most pleasing in its exterior.

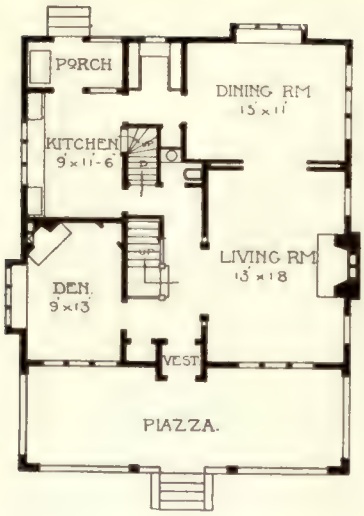
In the design of this "commodious $4,000 cottage," the walls are cemented on the outside, the gables showing half timbers and verge boards. Side windows in the second story are covered by low dormer or shed roofs in keeping with the style. The size of the house is 31 ft. square with the addition of a piazza across the front 10 ft. wide. The treatment of the piazza is in harmony with the house with a broad spreading gable roof.

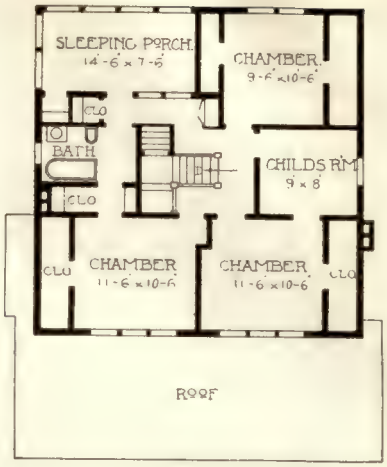
The vestibule entrance is in the center opening into a hall 6 ft. wide with stairs leading to the second story. A wide columned opening at the right opens into a large sized living room and into a small den; both of these rooms have fireplaces.



The walls are cemented on the outside. The gables showing half timbers and verge boards.—*C. S. Sedgwick, Architect.*

The dining room is located directly back of the living room and is connected with sliding doors. The kitchen is at the rear of the den. The interior finish of this floor is Washington fir, stained. Floors are oak. The second floor has four good bedrooms and a glazed-in room or sleeping porch at the rear, 14x8. The arrangement of this second floor is very good, the main stairs landing in the center of a wide hall, a small section of





stairs from kitchen connects with the main stairs. This second floor is finished in pine, enameled. Flooring is birch.

The cottage is well built. The walls are sheathed and papered on the outside and cemented over metal lath. The roof is shingled and stained red, and all exterior trimmings painted white. There is a full basement under the house with concrete foundation.

A Semi-Bungalow or Story-and-a-Half Home

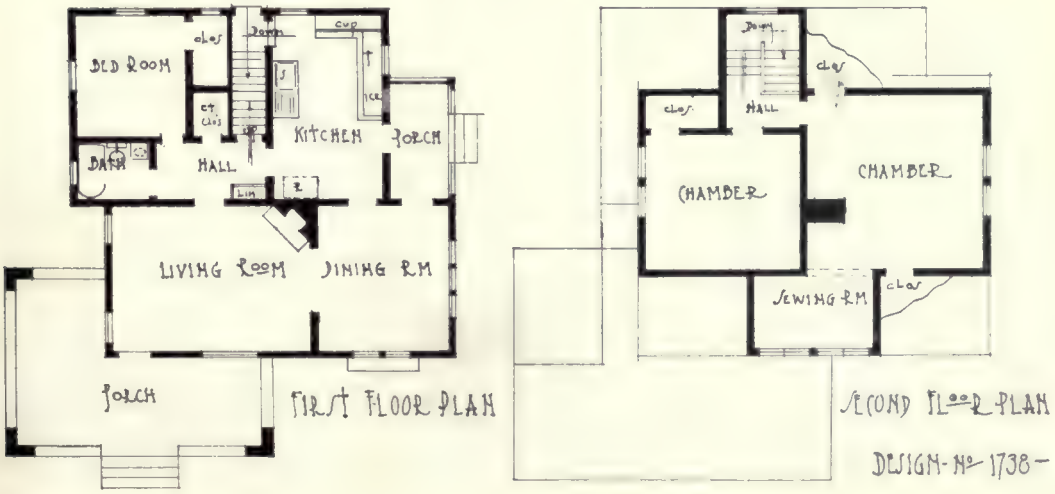
While the bungalow with its wide overhang and simple treatment of the cornice has become so popular, yet there are a great many of our readers who still hesitate at the idea of having all the bedrooms on the ground floor. It is for this reason that the so-called "semi-bungalow," or better still, the story and a half cottage, is becoming even more popular, especially in the East, Central and North Central States.

There are two other important considerations in favor of the semi-bungalow or "story and a half home." The fact that much less ground space is required, enabling one to build on a comparatively small lot and still have a lawn on each side of the house and the even still greater item of importance, less costly type of home, for the same number of rooms. Bungalows are pretty, artistic and have much to commend them under favorable conditions, but it is a well established fact that for the equivalent in rooms, in a home of from five to ten rooms, it costs more to spread them out on one floor and they are more difficult to heat than where rooms are both up and down. More excavation is required and a larger amount of foundation work for the one-story bungalow; also a corresponding amount of roof construction while the perpendicular walls are equal to those of the story and a half type. In spite of all this, the bungalow is the choice of many home-builders.



A rather plain yet attractive looking story-and-a-half cement plaster cottage.—*Keith & Purdy, Architects.*

Here we have a rather plain yet attractive looking story and a half cement plaster cottage, with a well planned interior. It has besides the living, dining rooms and kitchen, a bedroom with a large closet and a bath on the first floor. Two large chambers and sewing room are in the second story, with ample closet and storage space under the roof. The floors throughout are of hardwood with hardwood finish for living and dining room, balance finished in pine. There is a full basement with fuel and furnace room, laundry and storage. Poured concrete was used in building the foundation walls.



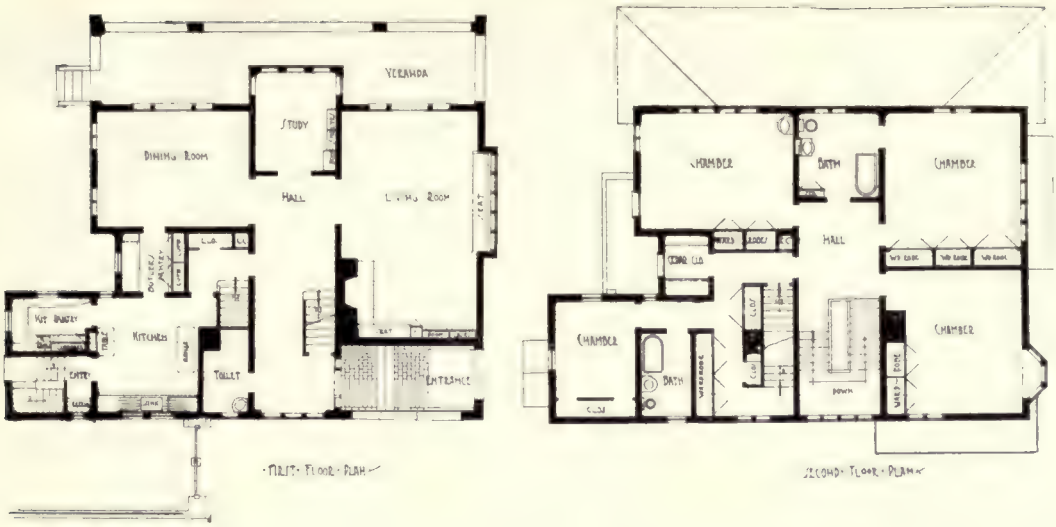
Stucco House with Unique Treatment

A strictly corner entrance is the noticeable feature to this interesting home-like residence in its setting of trees and shrubs. One instinctively feels the quiet atmosphere and anticipation upon entering, of finding a home complete in comfort and attractiveness. Nor will one be denied. What a glorious family living room with its splendid array of casement windows, fireplace and cushioned seats. At one end are French doors leading upon a spacious porch which must be a delight to the family and visitors on hot summer evenings. Observe the excellent lighting and ventilation of the "study" set so snugly between the living and dining rooms. The convenient kitchen with its double pantry. The arrangement of the second story rooms is so good that I would suggest a careful inspection of the floor diagram. Casement windows duplicate those beneath; closets there are galore and two bath rooms.

The servant's room and bath are located off the rear hall with a stairway to the attic where another servant's room and large billiard room is finished off. In the basement is a well equipped laun-



A corner entrance is the noticeable feature of this interesting home-like residence.—*Lawrence Buck, Architect.*



dry, dry room, children's play room, furnace room containing a hot water heating plant and fuel.

The exterior walls are frame with cement plaster over metal lath; the roof is of shingles, stained. The floors throughout are of white quarter sawed oak. Kitchen in pine to be covered with linoleum with tile floors and wainscot in baths and first floor toilet. Brick steps in entrance.

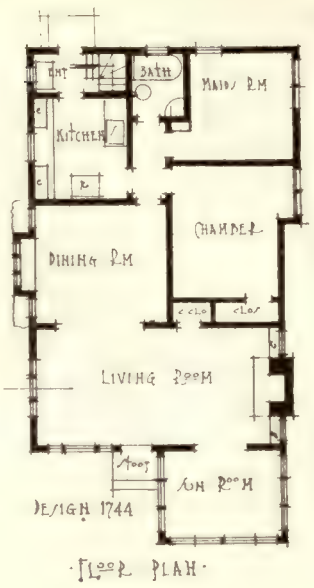
Finish of first floor in white quarter oak; kitchen and second floor in pine, white enameled with birch doors stained mahogany. The designer is Mr. Laurence Buck.

An Economical Bungalow

(Description and Floor Plan on following page)



In this modest little bungalow we have all the conveniences of a higher priced home.—*Keith & Purdy, Architects.*



In this modest little bungalow we have all the conveniences of a higher priced home. The plan is all on one floor, attic for ventilation only, and while the rooms are not large, the house will accommodate a family of five.

The living room extends across the entire front and with a fireplace, built-in bookcases in the end and French doors leading into a sun room, the whole composition presents a very attractive appearance. The dining room has a built-in buffet. The kitchen and rear entry are very complete with built-in cupboards, a place for refrigerator, sink and gas range. The plumbing, in fact the whole house, has been carefully studied in order to make this "an economical bungalow."

Basement contains furnace, fuel and vegetable rooms, besides a good laundry and a large storage space.

Foundation walls are of concrete with a course of boulders above grade. Wide rough sawed drop siding for first story, shingles or cement plaster in the gables, shingles for roof stained, constitute the materials used on the exterior. The floors throughout are maple. Standing finish is yellow pine, stained. Plastered walls left rough and tinted. The finish is all very simple.

A Story-and-a-Half Cottage

A factor in keeping down the cost of a modest cottage home is eliminating an external porch to the house proper as shown in this study. In this design the front porch is merely a corner recess under the overhang of the second story. On the opposite side the space is occupied by hall and stairs. The broad gable expanse is broken by the timber work surrounding the second story double window and the wide shed type of dormers on each side provide the necessary head room and windows for the two side bedrooms and bath.

The exterior perspective gives one the impression of a very small cottage, but the exterior is very deceiving, for on studying the plan, at a glance one sees quite a lay-out. Four large chambers, a large bath and separate toilet space, together with ample closet space under the roof complete the second floor arrangement. Part of the front chamber extends over the front porch which accounts for this amount of room.

The first floor plan calls for an attractive stair in the front hall. Note how convenient the kitchen is located to the front part of the house. The stairway to the basement is under the main stairs with a grade door at landing. The large living room with projected bay and brick fireplace, is very attractive. A columned opening separates the living and dining room, which has a built-in buffet. The rear porch entry and pantry are well situated.

The basement extends under the entire house including front porch and is very

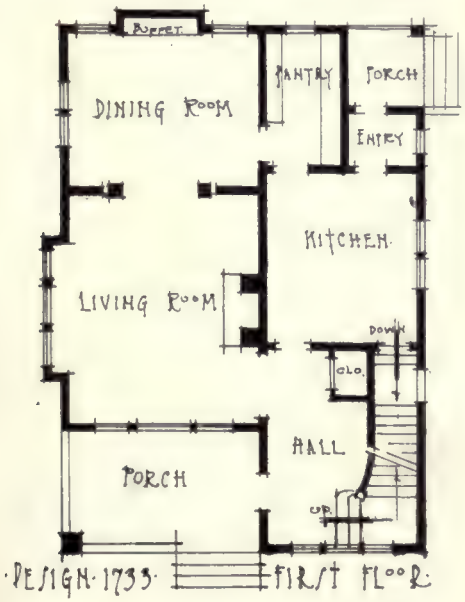


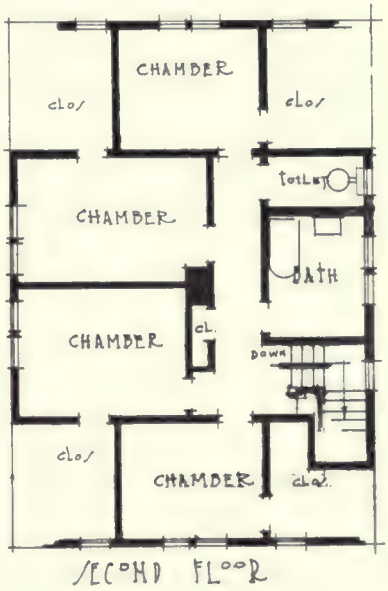
The front porch is merely a corner recess under the overhang of the second story.—*Keith & Purdy, Architects.*

complete including a hot water plant.

The exterior walls are covered with metal lath over which the cement plaster (rough cast), has been applied. The half timber work in the gables divides this so as to make the whole front unusually attractive. It is suggested to make the stucco work a light tan or cream color, timber and cornice work a brown, roof shingles maroon, which color scheme is warm and unobtrusive.

The foundation walls should be poured concrete carried above grade and the stucco finish carried down over same.





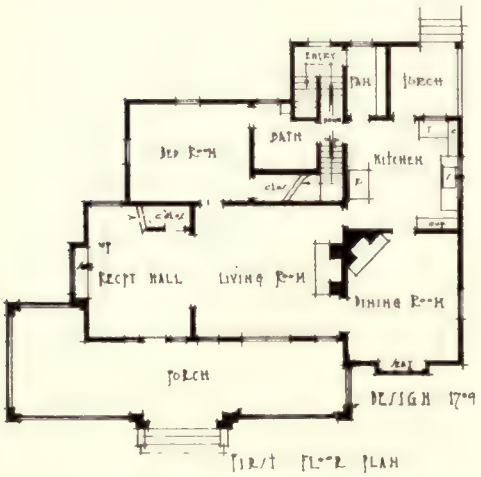


A roomy, inexpensive frame house particularly suitable to the needs of a large family.—*Keith & Purdy, Architects.*

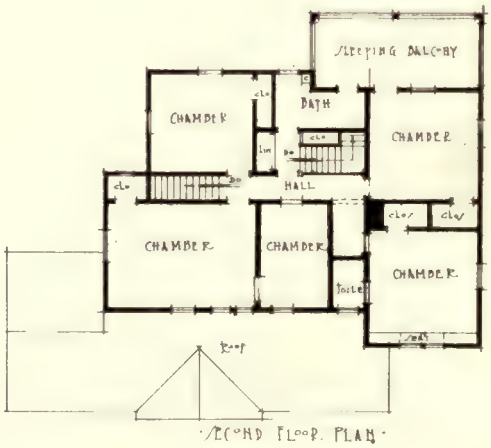
A Southern Home in Concrete and English Half Timber

The easy adaptability of cement to exterior stucco work makes it a universal favorite in residence building, not only for the South, but is proving an entirely satisfactory outside wall for cold climates.

In designing a home for a southern client, the requirement was to provide at least six bedrooms, a big square living room with large reception hall and a dining room to the front. In other words, a roomy, inexpensive frame house particularly suitable to the needs of a large southern family. The rooms are all large, well arranged and there is plenty of closet space. There is a front and back stairway, besides a separate stair to basement



FIRST FLOOR PLAN



SECOND FLOOR PLAN

which provides an additional rear entry and grade door. A large bedroom and bath is located on the first floor. On the second floor are five chambers and a large sleeping balcony. Attic space for ventilation and storage only.

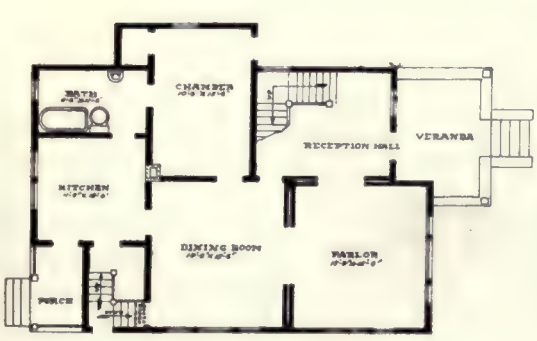
The plans provide for several built-in window seats and two fireplaces which serve a utilitarian purpose fall and winter as well as a decorative feature to these rooms. Numerous casement windows add to the attractiveness of both exterior and interior.

An Inexpensive Frame Cottage

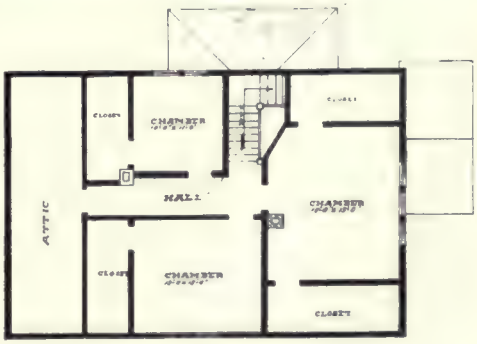
(Description follows on next page)



A story-and-a-half cottage with a small porch placed at the extreme right.—*F. E. Colby, Architect.*



FIRST FLOOR PLAN



SECOND FLOOR PLAN

In this design we have another story and a half cottage with a large bedroom and bath on the first floor. The small porch is placed to the extreme right so as to enter into a reception hall with the living room to the left. The rooms are all good size being separated by sliding doors.

There are two chimneys, the one in the front bedroom permits the use of a stove in the front part of the house should the owner desire to omit the heating plant. The kitchen chimney is built up from the basement in order to accommodate a heating plant at some future time.

The foundation is of concrete with brick facing above grade.

The exterior walls are covered with siding; with the belt course as shown it would not be expensive and would make this much more attractive to use cement below and shingles in the gables. In order to reduce the expense the house is finished white pine but has hardwood floors.

A Sunny Room House

In this design we have a very popular plan with many distinctive features. The central hall with the living room on the one side and dining and serving quarters on the other, make a very practical, convenient and artistic arrangement. The only objection to the lay-out is the fact that the average city lot is from 40 to 50 ft. and with the front porch placed on the side as a sun room, the plan will require either a corner or a double lot.

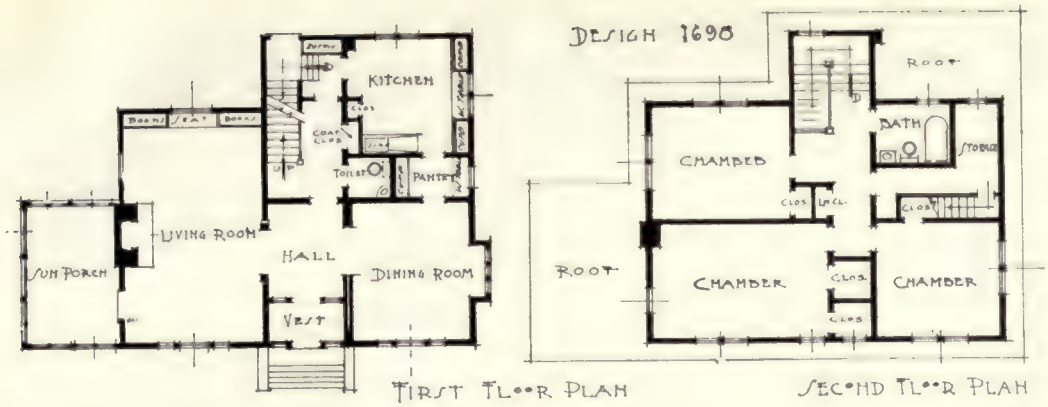
The hood over the entrance is a simple yet attractive shelter.

On entering the hall your attention is drawn to the massive brick fireplace on the opposite side of the living room with French doors leading into the sun porch. As we step under the columned opening into the living room you will observe the attractive treatment of the end of this room with a broad window seat in the center and bookcases on each side.

The dining room, closed off from the balance of the house by sliding doors has a built-in buffet with high casement windows above this; this too is seen from



The hood over the entrance is simple yet attractive.—*Keith & Purdy, Architects.*



the living room when the doors are left open.

The kitchen is very complete with work table and built-in cupboards; besides this, there is a serving table. A good size coat closet and toilet are located off the rear hall, both in a very convenient place. A stairway leads from this hall to the second story. The stairs are open, yet are shut off from the balance of the rooms. This plan does away with a back stair and prevents a draft down the stair well, which is so generally the case, in the open stairway treatment. The three chambers on the second floor could be reduced in size in order to obtain an additional one if desired, or the sun room could be carried up two stories thus providing a sleeping porch. There is a full basement with concrete foundation walls; a course of brick at grade provides a water-table.

The floors throughout are birch with pine in the kitchen, over which the owner intends to lay a good grade of linoleum. Tile floor is provided for in the toilet and bath. The finish for the living room and hall is of oak. Kitchen and pantry are in yellow pine finished natural and the second floor is in pine for white enameling with birch doors.

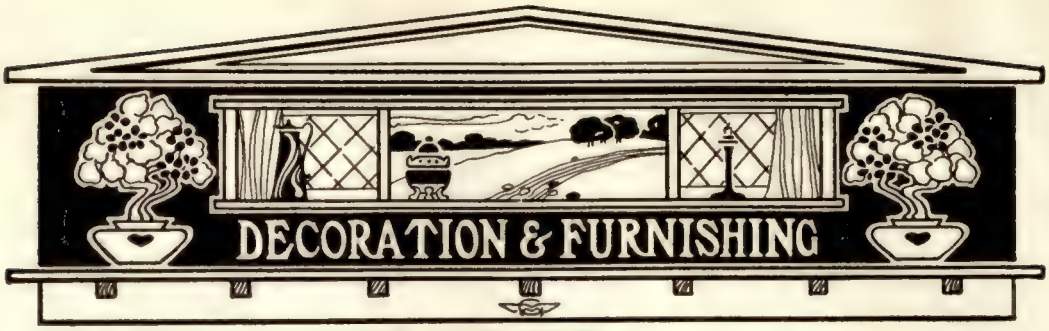
Decorative Wall Paneling

(Continued from Page 18.)

frieze could be adapted, and the coloring of the walls made to harmonize with it.

In the example given of a bedroom wall the desired effect is a delicate orderly appearance suggestive of cleanliness and light. The long narrow panels reach almost from floor to ceiling, broken only by the plain horizontal spaces at the top. The scheme of coloring is a shade of pale old rose for the long panels, deep ivory for the upper panels and the ceiling, with pale ivory white for the woodwork. The floral design is a trailing rose pattern in tones of subdued green for the foliage and stems and old rose for the blossoms. This could be executed with a simple stencil or a cut paper border could be used. This combination of tints and paneled spaces would form a restful background, making pictures almost unnecessary, but if desired a few could be added,

These examples will show that paneling need not be an expensive form of decoration. In cases where the woodwork is to be painted or enamelled there is no necessity to use a wood having a costly grain, and when used in conjunction with oil painted walls, with their lasting qualities, a really economical decoration is produced.



Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

Remodeling An Old House.

DURING the past autumn the decorator ran across a remodeled house in which some of the problems which come up in remaking the country house of a commonplace type had been very well met and their solution may be of use to some of our readers who are meditating reconstructions.

The house was one built some twenty-five or thirty years ago with a narrow hall, a small room at the right of the entrance, a dining room with an alcove back of it, a double parlor with folding doors at the left of the hall. No scheme of decoration could be evolved which would do anything to mitigate the contracted effect given the minute the front door was open. Otherwise the house had many good points, admirably arranged window openings and spacious side piazzas and an enchanting view up and down a tidal river.

The first step was the pulling down of the partition wall opposite the staircase, making a single room of the hall and the space at its right. The partition between the front room and the alcove of the dining room was also moved, giving them good sized rooms on the first floor, exclusive of the kitchen, servants' dining room and laundry, which were grouped at the rear of the double parlors.

The staircase came to within a very short distance of the front door. Four steps were cut off and a square landing made, the remaining steps attached at its right side, the balustrade facing the front door being an extremely decorative feature. The space beneath this landing was used for a shoe and rubber closet. After the staircase was remade the partition between the hall and the parlor was removed, also the partition and sliding doors between the back and front parlors. The beams at the top of these partitions were retained and supported by fluted pillars with Corinthian capitals and the opening between the hall and the dining room was also pillared.

The chimney pieces were brick and their rather low shelves were replaced by high ones and in the long drawing room a Colonial mantel of white panelings with a narrow shelf was built in. Narrow recesses on either side were made into closets with paneled doors, the spaces above them also paneled so that the entire end of the room was of wood, with an extremely dignified effect.

The woodwork of the drawing room and of the square hall and all the pillars were painted white. In the dining room the woodwork was stained mahogany. Here a useless door was removed and the upper part of the vacant space was filled by a shallow cupboard with latticed glass doors, an interesting feature in that side of the room.

After the work of reconstruction was done the walls were a problem, as it seemed inadvisable to reduce the apparent size of the not very large rooms, much broken by window and door openings. After much consideration a paper in inch wide stripes of white and the faintest gray was chosen for the drawing room and the hall. A fault in the proportion of the dining room made it desirable to reduce its height; however, it had had a chair rail which could not be removed. An imported paper of large white flowers and green leaves was laid above the chair rail, with white burlap below it. The electric light dome was green and the room opened into a large screened side porch with light green side walls latticed in a darker green. In this setting of green, white and mahog-



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any woodwork and furniture the blue and white china on the table, sideboard and shelves fitted admirably.

In the hall the rug and upholstery were dull green, the curtains an American cretonne in a blurred design of roses and leaves over others of white madras. In the drawing room there were a few pieces of good mahogany, a long sofa covered with the rose cretonne and the same curtains as in the hall. The rugs were Scotch, gray with a rose border, and the few pictures carried out the pink suggestion, while those in the hall had a predominant green note.

On the second story the only problem to be met was the awkward appearance of doors of differing heights, the rear rooms of the house being lower than those at the front. This irregularity was corrected by the addition of a panel above the frame of the low doors framed by the extension of the jambs to the same height as the others.

Papering the Colonial Bedroom.

To have at least one bedroom with antique furniture is the desire of most house mistresses, but too often its good effect is marred by a lack of attention to the room itself. The figured wall paper was the rule in houses of any pretensions, but not every figured paper is suitable and it must be remembered that whether correct or not cretonne furnishings cannot be used with a wall of decided pattern.

For a room of fair size and well lighted the foliage papers are extremely good, and those with a comparatively small pattern and rather set effect carry out the old fashioned idea better than those of more modern type. Another admirable paper for a room of this type is one which reappears year after year, a Japanese looking design of pine tree branches in blue on a white ground. It can also be had in green but that coloring is far less pleasing. Still another sort of paper for the old fashioned room has a white ground with big branches of flowers realistically treated, the design surrounded by a suggestion of shadow produced by the use of tiny black dots. Occasionally one finds a paper scattered over with tiny landscapes enclosed in some sort of scroll work and these papers are excellent for this purpose although some of them are rather colorless.

With these strongly patterned walls, curtains and bed hangings should be of dimity or some sort of striped muslin. For draping the four poster nothing is so good as dimity, with an edging of narrow cotton fringe or gimp, and the sill length window curtains should match.

It is quite possible to have an old fashioned room without any upholstery, using rush seated chairs and dispensing with anything in the shape of a couch or easy chair, thus avoiding the conflict of two patterns, one on the walls, another on the furniture. A compromise is possible by covering chairs and couch with a striped material, white with the general tone of the walls, or else using one of the French cotton fabrics, jaspé or armure, which are specially intended for wall coverings. Indeed it is a pity to forego the air of elegance given by the high backed, winged chair, standing by the fireplace.

Washbowls and Pitchers.

Even if the occupant of the old fashioned room is invited to use the bathroom, the effect of antiquity is not complete without a visible washstand though there may be a set bowl in an adjoining closet. For the blue and white room it is a simple matter to find a toilet set in old blue, reproducing the willow or other Staffordshire ware. For other colorings the sets of Colonial glass are satisfactory, if not so accurately correct as china, while diligent search may disclose some printing of formal old fashioned flowers on shallow bowl and squatty pitcher which will suggest antiquity. Sets either in plain color or else in white with colored bands, which can be matched for the bedside table, are inobtrusive and give a pleasanter effect than those of glass, often supplying a needed note of positive color. A splasher of dimity or muslin should match the curtains.

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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Decorating a Remodeled Interior.

B. H. W.: "I am remodeling my home and want to ask for some information as to finishing woodwork, furnishings, etc."

Ans.—A remodeled interior always presents difficulties, but you appear to have already considered yours very intelligently.

First, as to the woodwork thru these rooms, nothing is more elegant, especially in a southern home, than a white or ivory enamel finish with mahogany doors, especially if much of the furniture is mahogany, and this treatment is greatly in favor at the present time. Your new doors will take a dark mahogany stain beautifully and we advise this for all doors except those in the den; here we would stain the doors brown to harmonize with the Golden Oak furniture, particularly as these are service doors opening into rear entry and closet. The door which opens into the dining room can be stained mahogany on the dining room side.

Much as we dislike to cover up oak woodwork with paint, it is the only thing to be done in your dining room, as it would be impossible to give it a mahogany finish now, and as for "graining," the gods forbid! Graining is a thing unknown in modern housebuilding. So we must face the music and paint the oak trim. As to ceiling beams, they may either be mahogany like the doors or ivory to match the other woodwork. As this room has only west lighting, we advise using the ivory beams and tinting the ceiling panels between very pale apple green. With 10-foot ceiling we would divide the wall, placing a chair rail at chair height with either leaf green burlap or its imitation below the molding and using above to the ceiling, an English chintz paper, cretonne design, having large brilliant blossoms and birds among green boughs on a white ground. Such a paper comes at $1.00 a roll. A cretonne hanging for the windows comes to match, which we would use in straight draperies to the window sill on the *outer sides only* of the double window, with a 16″ valance running across the top. Then have the floor stained mahogany and a rich moss green rug, plain, to match the green portieres. It will be a very elegant room.

The rose in your parlor will be charming and your idea of white wicker furniture, delightful. The wicker should be painted, however, and not natural, then upholster two arm chairs in cretonne, having big bunches of deep rose colored hydrangeas on white ground with a third small chair and a wicker settee having seats of rose velvet.

We would paint the woodwork ivory and hang the walls with shimmering white grass cloth, with a frieze of rose pink garlands. Now let your living room and den walls be tinted a soft ecru which will open very harmoniously from this parlor in rose and ivory. Have rug and hangings in living room mulberry color and in den use shades of brown and old gold.

For the Country House.

L. L.: "I am enclosing the floor plans of our new country house and wish suggestions in the finish of walls and woodwork. The woodwork and floors downstairs, with the exception of the kitchen, are oak, the rest of the house is pine, downstairs the doors are two panel oak, upstairs, one panel fir. We thought to leave the wood in the natural, not stain it, would you advise waxing it or using flat varnish?

We have very little furniture to take into the house, a circassian walnut bed and dresser and an iron bed and birdseye maple dresser, our dining room table and chairs will be waxed oak, etc."

Ans.—In reply to your letter requesting suggestions on interior decoration, we fear

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$50.00 for the best contribution.
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$20.00 for the 3rd best contribution.

DO not be afraid to take part in this contest for the experience in building a bungalow cottage is just as likely to prove the most interesting and win a prize as the "experience" of building a large colonial residence.

WHAT TO DO

TAKE a clear picture of your new home and, if possible, one or two good interior views. Then in a conversational way (just as you would tell a friend) write what happened—how you came to build, how long you studied plans before deciding, what method you followed. what you did to learn about building materials, finishes, etc.

All our readers are interested to hear about these things and you will get a good deal of pleasure out of it yourself.

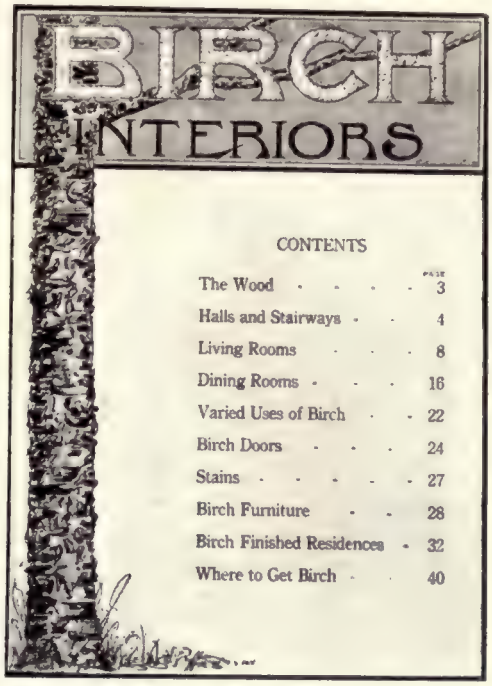
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you will regret it if you finish the oak woodwork entirely natural as it is impossible to get furniture that will harmonize with natural oak, in the living room at least. You speak of your dining room furniture as waxed oak, but we presume you mean it has a dull waxed and not varnished finish. We do not think you could find dining room pieces finished *natural,* unless made to order.

Our advice is to confine the natural wood to the floors alone and to give the standing trim a *light* fumed oak stain then wax and rub. We would furnish the southeast front room as a library, with built in bookcases each side of the front windows and a couch or davenport along the stair wall, with a library table in the center of the room. These pieces we would purchase in light fumed oak and upholster the couch or davenport in a cotton tapestry having a tan ground with small figure in rose and line of black. We would tint the ceiling cream color and the walls soft tan with a rug in tones of brown, tan and rose. A stencil band beneath the picture molding in a conventional pattern such as a Tudor rose in dull rose with dull green leaves, would be very pleasing.

In the living room we would carry the same tones on the walls, but combine it with a soft green rug, green draperies and furnishings and wicker furniture upholstered in a foliage design in greens and blues.

The dining room we would do with old blue walls, blue and tan rug and old gold Sunfast at the windows.

In regard to the finish of the upstairs woodwork, we do not see how you can finish it natural as the fir doors would be entirely different from the pine when shellaced and varnished. We would stain the fir doors a mission brown and paint the pine woodwork cream color. This is very effective for a second story treatment.

As to the choice between painting and tinting the plaster, we think the water color finish the best for sand finished plaster, particularly for ceilings.

The Living Room.

A. E. N.—Am writing you for advice about furnishing a living room 15½'12', having an east front, with an alcove and vestibule on the east, a triple window on the south, door to den and stairway on west, and colonades to dining room on north.

The walls are in pale green with cream ceiling and woodworks in birch, mahogany finish.

We have a piano and music cabinet in mahogany and book cases in colonade, and seat in the alcove. What furniture could we use that would go well with them?

What colors for rugs and curtains?

Also a bed room having one window on the north walls in light yellow. Could we use white enamel furniture or would that make too much light color?

Would you advise staining the yellow pine floors in living room and dining room mahogany or oak?

Ans.—In regard to furniture for the living room described, we would suggest a library table in mahogany finish, also an easy chair with mahogany frame and upholstered in a tapestry of mixed color: green, tans, rose, with rug showing the same coloring.

If there is room for a davenport upholstered to match, it would be a great addition. For any other chair we would get a green stained wicker.

Curtains of cream figured lace with side draperies of medium green Sunfast. We would use a slight brown stain on the floors.

White woodwork would not be too light in the north bedroom, but would be very pretty with yellow walls.



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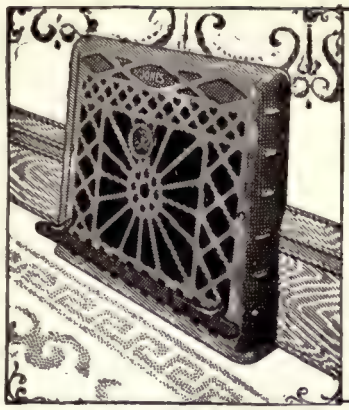
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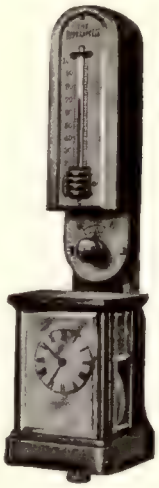
M. L. KEITH, 828 McKnight Bldg., Minneapolis, Minn.



By "The Economist"

Heat Regulation in the Home.

TO have the heating plant automatically controlled for a change to warmer temperature in the morning and to secure with only the slightest attention a fixed, even temperature throughout the day is a condition that most home-owners would classify as being ideal. However, the manufacturer of a certain heat regulator makes these claims for his product under a positive guarantee.



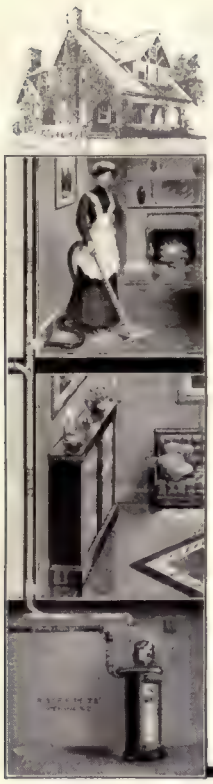
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This device can be installed at any time, although the most satisfactory time would be while building, however, any one in the midst of home-building plans would do well to investigate. The manufacturer will send descriptive literature on request.

The Way to Save the Wages of a Cook.

Electricity is slowly but inevitably working a revolution in the details of household work and when the touch of a button here and there, will clean and lift, cook and bake and wash and iron for us, the dream of the servantless house will at last come true. The Economist has just learned of a wonderful new electric range that can be implicitly trusted to start the cooking of your dinner at the right minute and keep the heat at the right temperature while you serenely shop or attend the theatre miles away. The enigma is easily enough explained. Before you leave your home you prepare all the foods for your dinner just as you would for a fireless cooker and adjust a little mechanism working on the principle of the alarm clock, which will turn on the current at the precise moment at which the cooking or baking should begin. Another little monitor will keep the heat at any point desired so that there will be no danger of burning, and the mysterious mechanism will also turn off the heat if you will determine beforehand the amount of time necessary to cook or bake the dish prepared.



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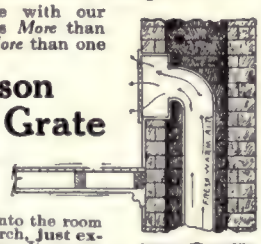
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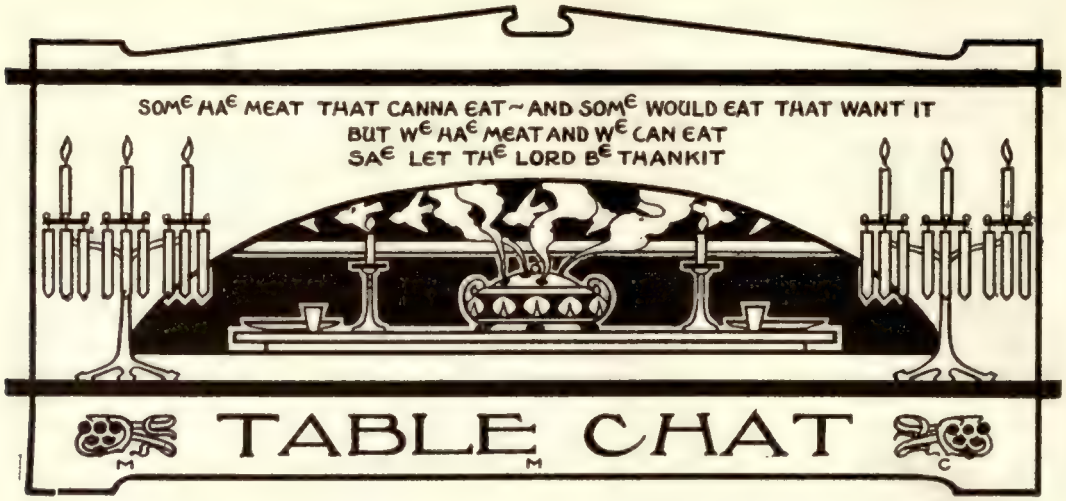
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ALTHOUGH we have quite outgrown the era of blue dinners, yellow luncheons and pink teas, with their extravagant display of wide satin ribbon, and their exaggerated straining after a consistent menu, still there is a certain charm in a meal with a color note of its own.

Perhaps the most satisfactory choice is green, blending as it does with the lustre of damask and the shimmer of silver and crystal. Violet, too, is dainty and a bit unusual. The two menus given will answer for either luncheon or high tea, and are very easily carried out.

A Green Luncheon.

Canteloupes
Boiled Halibut, Maitre d'hotel, Butter
New Potatoes Moulded Spinach
Vegetable Salad
Pistache and Vanilla Ice Cream
Cakes with Green Icing Coffee

The canteloupes may be served plain or the cavities may be filled with grape fruit pulp, slightly sweetened and flavored with sherry. The vegetable salad is made from peas, string beans and tiny balls cut from boiled potatoes, arranged on a bed of cel-



Violet cream.

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ery leaves and garnished with rings of green pepper.

A Violet Luncheon.

Clam Bouillon with Whipped Cream
Breast of Chicken, Heated in Cream
Potato Balls Olives
Salad, Apple and Celery,
Served in the shell of an Egg Plant
Finger Rolls Cream Cheese
Violet Cream
Angel Cake Violet Bon Bons
Delaware Grapes Coffee

off the bottom. Remove all the white flesh and fill the cavity with the prepared salad. The upper part and the flesh can be used the next day for stuffed egg plant.

For the violet cream, soak half a box of gelatine in half a tea cup of water for twenty minutes and heat it; beat into a pint of whipped cream, stirring into the mixture a quantity of candied violets. Let it harden in small moulds, like custard cups, and when they are turned out decorate the top of each with a candied violet, surrounded by leaves cut from angelica or from candied green gages or rhubarb. Cut



Vegetable salad.

Make the clam bouillon from fresh clams, using equal parts of the clam liquor and milk, and thicken it slightly. Serve it in cups with a spoonful of whipped cream. Boil the chickens the day before and detach the breasts from the bone, also removing the skin. Cut them into convenient pieces for serving and allow just enough cream to cover them when they are arranged in a casserole. Season the cream and thicken it, and just before luncheon put in the chicken and let it heat through. For the salad choose a large egg plant, cut off about a third of it, and if necessary square the angel cake in squares and cover each with violet icing. Buttercups can be had in violet and may be mixed with peppermints.

For both of these luncheons white or white and gold china is suitable, and the service may be varied by the use of individual dishes of the color of the decorations. For the green luncheon use masses of ferns in the corners of the rooms and in the fireplace, white flowers and mignonette on the table. For the other decorate the table with violet asters and the room with ferns and lavender foxglove.

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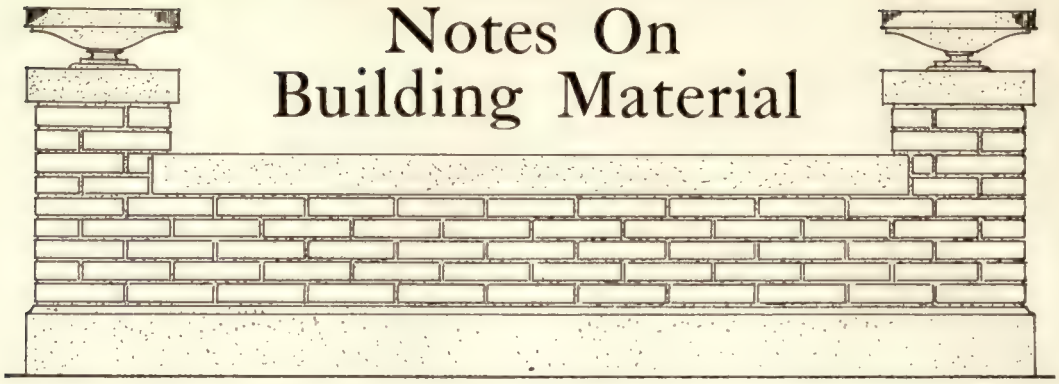
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Notes On Building Material

Some Notes About Concrete Building.

F. H. Sweet.

ANY material in its formative state of development is apt to be misunderstood and misused by designers. Concrete being still in the formative stage, meets with such maltreatment. Many concrete houses of today were designed for stone, brick or even frame, and then by chance at the last moment the material was changed and a so-called concrete house is produced. Naturally such a building can only come under the classification of nondescript, and good results even structurally can hardly be looked for.

It must be clearly borne in mind that the material with its possibilities and limitations determines a style or design. Therefore, unless one constructs according to his material it is impossible to obtain the most satisfactory result from either an architectural or a practical point of view. It is unfair to the architect and to the material to carry out a house in concrete that was originally designed to be built of something else. Reinforced concrete construction is a new art, and to obtain the best results the owner, architect and engineer must work together. Then will it reveal its unlimited possibilities.

The ideal house of concrete, as we see it, is one with a flat roof, crowned by a parapet or some simple perforated patterning such as one sees in the country barns of Italy for airing the hay. It is better to avoid the stereotype balusters and moldings (which have so long been associated with stone work), not because of any difficulty in casting, but simply to avoid stamping concrete an imitation of stone. The windows should be grouped rather than separately spaced, for the additional span is a simple matter with reinforcement, and then one can concentrate on each group surrounding it with a mosaic or scraffito treatment which offers a pleasant relief from the necessarily bare reveals of the plain windows.

The flat roof is suggested in preference to the pitched because it is obviously cheaper and is the natural form. Shingle or slate roofs are pitched to insure a dry interior; a flat shingle roof would, of course, offer but little protection from water. The flat concrete roof, when composed of a rich mixture and properly done, is a perfectly practical roof.

As an example of successful collaboration between architect and engineer, might be mentioned some recently built columns for a pergola. They were inexpensive to construct because they had been intelligently designed with twenty flat sides to accommodate the material. They could thus be made with the board marks showing. They have the same play of light and shade as true Doric columns, and at a short distance are identical. But if they had been designed as true Doric columns with hollow flutes the cost, owing to the difficult forms necessary for casting, would have been prohibitive—to say nothing of the danger of breaking the sharp arrises of the flutings, both during the construction and after.

As a final suggestion, it should be borne in mind that concrete is a cast material, and therein lies its future. The scoring of the walls in imitation of stone blocks, or even laying up the walls in the form of stone blocks robs it of its great individuality as a building material.



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Many of us, I believe, stand convicted of crime in this regard against future generations. There are instances available where 5% of the cost of the building, expended on heat transmission insulation rather than on a larger heating plant, saved in fuel charges alone its cost within three years. The field this opens up is almost unexplored. We know, however, how much more efficient as regards heat insulation is an ordinary sawdust packed icehouse than an ordinary dwelling, and how much longer heat is retained in an ordinary fireless cooker than in any part of the best insulated transmission department of an ordinary heating plant.

Improvements Needed in Building Construction.

We know that poor insulation of walls and windows is the greatest enemy of good ventilation, preventing proper diffusion of the fresh air. We know that tight windows or storm sash permit of very considerable fuel savings. We know that warm winter buildings are cool summer buildings. We know that a $10,000 investment with a 5% interest charge is better for the borrower than an $8,000 investment with a 20% interest charge. We seem, however, unable to get perspective enough to use this knowledge, else buildings with rattling windows and no storm sash, thin walls, cold attics and cellars, direct-indirect radiators, unduly high ceilings, single slab roofs, etc., coupled with the most elaborate and expensive heating plants, would cease to exist.—*The Heating and Ventilating Magazine.*

Location of Heat Source.

In our practice as engineers are we losing perspective in regard to the location in the room of the heat source? We learned, very early in our experience, that the heat transmission varies, among other things, in a certain proportion as the difference in temperature between the hot and cold objects varies. Is it then the best practice to place the hottest thing in a room against the coldest object? The dean of one of our greatest engineering schools agreed with me that in most instances the radiator location was far more a factor of the convenience of the occupants of the room than of their comfort. Granted reasonably tight windows and fairly well insulated walls, the radiator may be alongside the inside wall as satisfactorily as alongside the outside wall. May not the radiator be smaller—will not the piping be less expensive—will not the fuel cost be lower, if this procedure is carried out consistently?

Cold Air for Ventilation.

It is not a loss of perspective to cling to the idea that air for ventilation shall all have been heated prior to its entry to a room? Our belief in this is traditional. Is it based on truth? It has been demonstrated that unheated air may be introduced into rooms under certain peculiar ideal conditions, and that under these conditions the air feels better to us than air which has been heated. This process has proven good for street cars. Shall we not hope for the development of the process for buildings, so perfected that it shall operate continuously and effectively? I believe that it will surely follow the construction of properly insulated buildings, and that we cannot attain approximately perfect ventilation until we build insulated buildings.—*Heating and Ventilating Magazine.*

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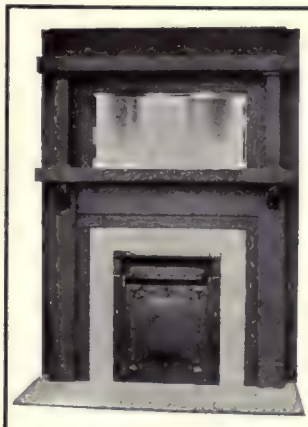
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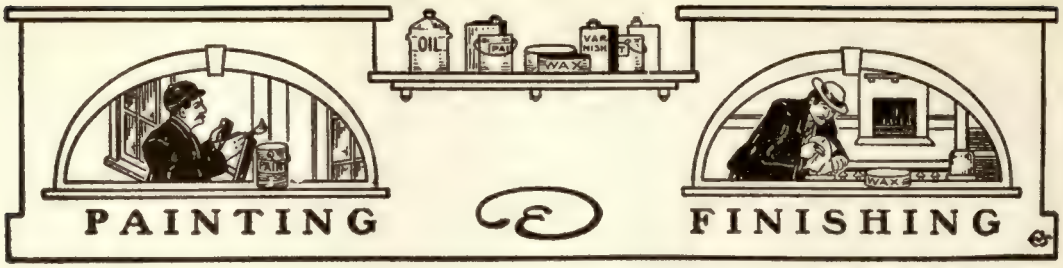
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Cleaning Paint and Varnish Brushes.

A correspondent asks for information on cleaning paint pots and brushes, and the editor has thought it well to have an article dealing with this not unimportant topic, says National Builder. Obviously good painting or varnishing cannot be done with unclean pots and brushes. In the first place I would say, keep them clean. Do not allow them to get dirty. In warm weather paint will be apt to gum up brush and pot if too much driers are used, and there always is, even in cold and wet weather. But this is another story.

Well regulated paint shops have a barrel of strong soda or lye water, in which dirty paint pots are placed, and after soaking a few days are taken out, scraped, the scrapings saved, and the pot made clean with water and rag or waste. Another method is by fire; place some paper or excelsior in the pot, sprinkle a little coal oil over it, and set fire to it; do this where no danger may follow. With care the soldering will not be injured. Scrape with a putty knife as the heat softens the old paint, and do the inside first, scraping down into the slight blaze until the insides are done, then remove the outside stuff.

As to the dirty paint brush, there are various ways for cleaning it. Any fluid that will dissolve oil will clean the brush. Ammonia water, creosote oil, benzine, turpentine, fusel oil, hot linseed oil, alkali water, hot water, etc. Some use the liquid known as paint and varnish remover, but this is very expensive (though it ought not to be, as it is composed of a cheap material), besides which it injures the bristles, taking the life or spring out of the bristles, making the brush flabby and too soft to work well. When the paint is very thick and hard on the outer bristles, do not cut these bristles away, as is too often done, but soften up the old paint, then scrape it away. Benzine and naphtha gum up oil paint, hence are not really good for cleaning the paint brush. If the brush is hard all through then soak it in diluted ammonia or hot oil, then rinse in turpentine and finally wash with soap and water. Or by making a paste with washing powder and covering the bristles with it, leaving it on over night, the old paint will be softened up. Or soak in turpentine and wash out with soap and water, then rinse in clear water, then twirl the brush between the hands to expel the water. Some recommend the use of hot kerosene, after which rinse in ammonia water. Before placing a brush in any hot solution wrap it in paper, to preserve its shape. Hang the dirty brush in hot water, not allowing the water to be above the bottom of the ferrule, and after the bristles have become loose from paint work same with the fingers, separating the bristles as much as possible. Repeat the hot water treatment until the heart of the brush has softened. Next place the brush in turpentine to soak a few hours, then take it out and work it out with a putty knife, removing the loose paint. If still there is hard or only partly softened paint, place the brush in some strong soap suds and boil until old paint is soft. Heat or hot water is a great softener of paint. When I have a lot of hard lead or zinc white and want to mix up a pot of paint, I take the hard paint out of the keg in small bits and place it in the mixing pot, then pour boiling water on it until the hard pigment is covered; I set the pot away for anywhere from 15 minutes to an hour, as it does not require a very long time, and then the lumps of lead or zinc are quite soft and may easily be mixed up with oil or turpentine in the usual way. I don't think many know of this little trick, and I only stumbled across its myself, experimenting one day. Old paint, dried on pot or brush will not soften up as quickly as the hard lead, yet with boiling and time it will, particularly when assisted with a little alkali.



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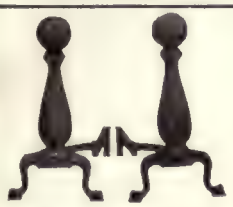
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Imitation Mahogany.

B. M. R.—What are the most common substitutes for mahogany and how are they finished?

Ans.—Baywood—a sort of unacknowledged half-brother of mahogany, hailing from the West Indies—is a very common substitute for mahogany, to the extent, in fact, that fully two-thirds of the so-called mahogany trim used in house work is baywood, and no one the wiser. Similar in texture, though somewhat coarser in fibre and lighter in color and weight than mahogany, it is difficult to distinguish the real from the spurious when the finishing processes have been completed. There is, however, little economy in using baywood for the reason that it ranks in price with the lower grades of mahogany.

Among the most practical and economical of the imitators of mahogany is birch—particularly the curly variety—a wood combining the desirable qualities of density, weight, strength, fine grain and close texture. Further than this, birch has a brilliancy all its own, which vies successfully with that of mahogany. Birch comes in both red and white, a point to remember in matching effects, as a stain that produces a satisfactory effect on red birch, will show with less character and diminished intensity on white birch.

Red gum easily stands third in the list of desirables; always with the reservation that gum showing a good grain produces the mahogany effect with greater fidelity than straight grained pieces, the latter showing but a lifeless color-imitation without the beautiful inner-glow.

In the finishing of all the woods mentioned above, acid stains are the accepted color media, for the reason that they preserve and enhance the natural brilliancy of the woods. In the case of birch, particularly, acid stains are desirable; this wood having an unfortunate propensity for changing color after a period of time, when the wrong stain is used, due to a chemical action which takes place between the stain and wood. This peculiarity of birch has given rise to the belief existing among some finishers that birch is inherently a treacherous wood to finish. No difficulty of this kind need be anticipated when acid stains are used.

Finish of Woods.

E. L. S.—We are very glad to give you the information requested regarding the finishing of various wood.

In regard to birch to be finished mahogany, I have to say that as this wood is a close grained wood it does not require the use of a filler. The wood is given a coat of mahogany stain and then two or three coats of varnish according to the quality of job demanded.

In treating oak, which is a splendid wood for dining and living room finish, it is customary to use a filler, as the grain is more open. If you want one of the popular shades such as English oak, fumed oak or weathered, the stain is put right into the filler.

Wood for bedrooms and the bathroom finish to be white enameled, can be either white pine, cypress or birch. I think that for bedrooms the dull finish is preferable, but for the bathroom would suggest the gloss enamel, which would have occasion to be frequently washed.


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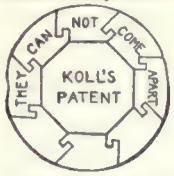
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Exhibit of Clay Industries of New Jersey To Be Held By the Newark Museum.

AN exhibition of the clay industries of New Jersey is now being gathered by the Newark Museum Association. It will open for six weeks in February.

This is the most ambitious work the Association has yet undertaken—ambitious in extent, for it will show in outline the whole range of clay industries, and ambitious also because it is, as far as can be learned, the first of its kind undertaken by a museum.

"We are going to take up an industry and make an art exhibition of it," says one of the museum officials. "A museum can so house, display and explain an industry as to lend to it a certain dignity and bring it all within the field of art. And every industry is, after all, an art in practice, an art applied.

"In Germany the Werkbund, a union of artists, artisans and sellers of goods, has done a similar thing in a small way for years. It has brought together the significant products of an industry or craft—such as wall-paper making, textile weaving and iron working, grouped it about a central idea, and fully and carefully labelled it. The resulting exhibit is sent in turn to many cities in which the particular industry it exploits is fully represented.

"If our New Jersey clay industries exhibition is as successful as it now promises to be we believe that other cities will wish to have the opportunity to borrow and display it before it is distributed. We also believe that success in this new line of museum activity will make it easy to treat other industries—some local to Newark, some state-wide, in a similar manner."

The clay industries were chosen for this exhibition partly because of New Jersey's prominence in these manufactures (she is second in the value of her pottery products in the union, their total going up toward the twenty-million mark in late years) and partly because the clay and brick industries are so scattered from the north to the extreme south end of the state that through them a wide interest can be attracted to the museum's educational-commercial efforts.

Manufacturers of brick, hollow tile, drain pipe, sanitary and electrical wares, as well as the makers of architectural terra cotta, fine and common china, tiles and decorative pottery have signified their interest in the exhibit, and their willingness to help to make it a success.

The co-operation of the Women's Clubs of the state has been secured to assist in bringing together an historical section of the exhibition, to include pottery and porcelain made in New Jersey before 1876. To aid in collecting these historical pieces intelligently, the Museum Association is sending to all clubs and many individuals throughout the state a pamphlet containing Dr. E. A. Barber's discussion of the work of New Jersey kilns up to 1876 as it occurs in his book, "Pottery and Porcelain of the United States," with illustrations of the marks of potters. All the pieces collected in Newark will be authenticated by Dr. Barber, who is conceded to be the leading authority on American pottery.

This will be the first effort made within the state to bring together a collection of pottery and china for local making, and the Museum Association hopes that it may be the beginning of a keen and helpful local interest in the work of former potters as well as those of today.

Complex Duties of Architects.

In discussing the complex duties of the practice of architecture at the present day a writer in a recent issue of the Engineering Record offers the following pertinent comments.

"Before passing hasty judgment upon the architect of our times, think a moment of the evil days upon which he has fallen. In the mediæval times he must perforce know only the technique of masonry—the rest was his art. If he were building a church, the fine stimulus of



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the Gothic was his inspiration, and his medium was craftsmanship in stone. Today he must know masonry and concrete, structural steel, and sanitary plumbing, lighting and heating, electric wiring and acoustics. His predecessor did not have to plan for buying his stone from one source, his steel from another, and his woodwork from a third; he was not hounded by agents of patented devices, nor pestered by circulars of supplies offering him 'the usual architect's commission of —— per cent.'

"All these things the architect of today has to endure, besides being called a slavish copyist, if he turns to the best in antiquity, and a commonplace innovator if he does not. His chief hope is in suiting himself as best he may to new conditions, calling in technical advisers on the details which he cannot in the nature of things have time to master, even if he has the ability, standing the more firmly by the interests of his client as he confronts a regiment of sub-contractors, and remembering that he must be artist before being engineer or contractor. —*Building Age.*

Owner's Rights to Real Estate Limited.

Ownership of the fee in real estate does not always imply absolute ownership. Frequently there are rights held by other persons, and, while there are several different classes of "rights," the most of them are restrictions.

A restriction is created by an owner, usually by deed, for the benefit of land adjoining or near by, and usually binds the owner, heirs and assigns, either not to erect certain specified buildings or not to use the land for stated purposes. It often provides the first building erected on the land shall be of a stated kind and shall not cost less than a fixed sum. Such restrictions are frequently limited to a term of years, and even permanent restrictions, in form and intent, may lose their force and effect as a result of changed conditions. The courts have so held.

But where an owner contracts to sell his property free and clear, and it turns out there is a restriction of record against it, the buyer can refuse to carry out the contract, even though such a state of facts exist as would make the restriction unenforceable, for it would require lawsuit to determine the facts and their effect and the buyer is not assumed to have intended to buy a lawsuit, says Real Estate News.

* * *

Some real estate leases are such formidable looking documents that not a few persons will not take the time or make an effort to read them so as to thoroughly understand the document to which they are affixing their names. They are apt to take it for granted that it is all right. But it really is important that this indenture receive more than a glance. Papers that enter into various agreements, contracts of sale, mortgages, building contracts, etc., are all complex, but none is more so than the average dwelling house or apartment house lease. In fact, in some cities they are regarded as "brain tangling," and becoming more and more so. Not many persons are aware of the fact that some leases of flats in the city have a chattel clause inserted that places the tenant at the mercy of the landlord if he cannot pay the rent.

Cleaning Terra Cotta.

In connection with the walls of a brick building it was desired to clean and brighten the terra cotta trimming, the bricks being of a deep tan color, while the terra cotta was of a light cream that had turned dark and was unsightly from many years' exposure. In answer to this question by a correspondent of the Painters' Magazine, the latter furnishes the following: The simplest way to accomplish this is to mix two pounds of powdered pumice and one pint of liquid ammonia with one gallon of soft soap, applying the mixture to the surface to be cleaned with a fibre wall brush, allowing it to remain about thirty minutes. Then rub briskly with a good scrubbing brush. When on trial it shows that the compound has done its work, clean it off with lukewarm water by using a large sponge and rinse, if possible, with a hose, otherwise with the sponge and a liberal supply of clear water. If after drying the terra cotta appears dull, it may be revived by rubbing it over with a cloth saturated with kerosene oil, which will give it somewhat of a "sheen."

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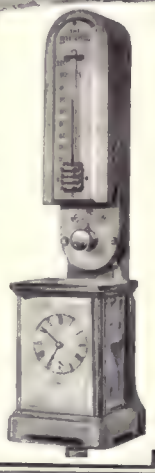


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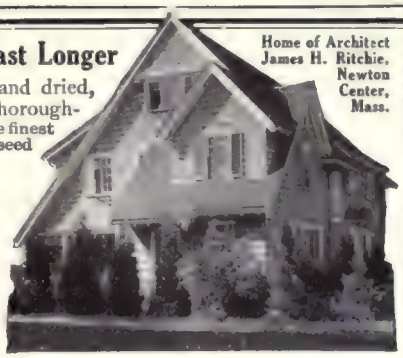
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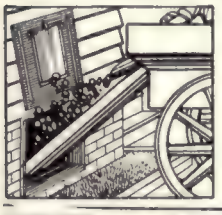


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* * *

A very interesting discussion under the subject "Proportioning Aggregates for Portland Cement Concrete" has been published by the Vulcanite Portland Cement Co. in booklet form for gratuitous distribution.

Text and tabulations are very thorough and should prove of great practical value to any one in this line of business.

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* * *

A pleasing little folder in green and gold is sent out by the Russell & Erwin Mfg. Co., of New Britain, Conn., to illustrate the *Russwin* hardware. The *Vignola* Design shown, in the style of Louis XVI would surely satisfy the most exacting taste.

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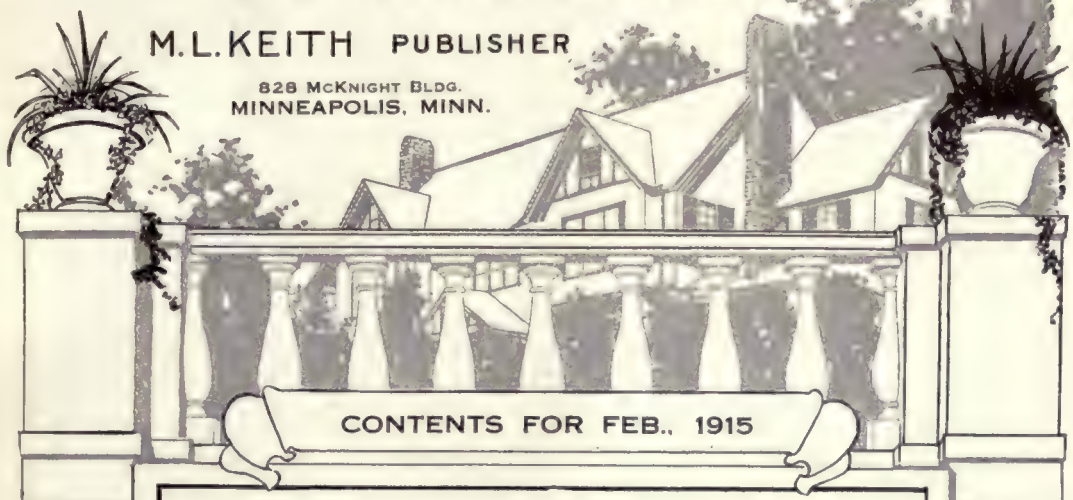
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An atmosphere of dignity and warmth conveyed by the environment of spacious setting and fine trees.

KEITH'S MAGAZINE

VOL. XXXIII FEBRUARY, 1915 No. 2

Example of the Newer Domestic Architecture

Residence of Mr. J. C. Cardwell, Chicago, Ill.
F. D. Chase, Architect

By John Sears Robinson

THE architect of today has a unique opportunity to express himself in domestic design. Not only is he free to choose any type he will and to express it in any material, but he may mingle his types and combine his materials with absolute freedom from all conventions.

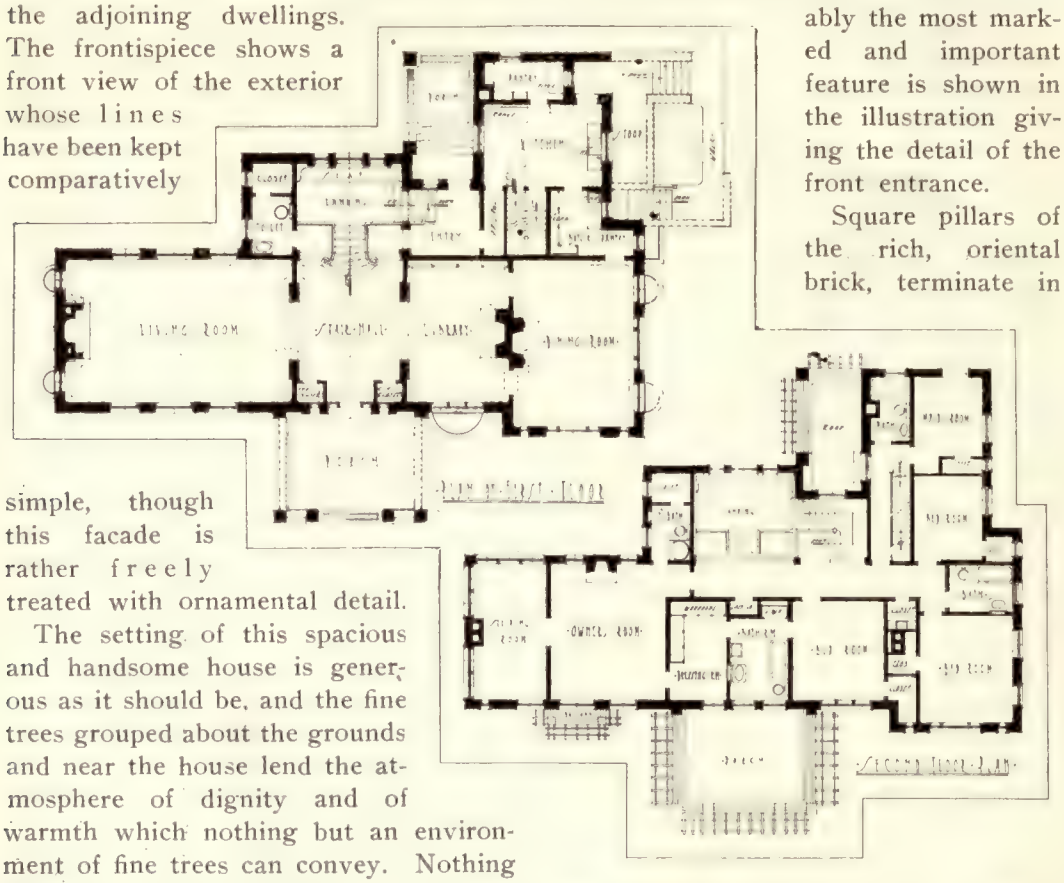
He is as full of surprises and new conceits in designs as was Shakespeare's model woman, whose charm consisted in her "infinite variety." Sometimes we are indeed reminded by these flights of fancy of "the unfinished window in Aladdin's Tower," which so puzzled the architectural critics of his time—for even then there were those who set themselves up as authorities, even as our own Russell Sturgis, from whose verdict there is no appeal. More withering yet to our adventurers, faring forth after new "effects," is the unexpected, though homely comment of the passersby—the plain people—upon some pretentious masterpiece. Like the old Scotchwoman, who beheld for the first time a gorgeous stained glass window in a city church and was asked how she liked it—"Ay, it is handsome," she replied dolefully, "But I prefer the glass just as God made it!" So it seems to quiet every day folk, when viewing the splendors of some modern architecture — we would prefer the good old ways.



Showing unusual ornamentation of the white terra cotta trim.

It is fortunate that in the subject of this article we are able to present an example of truly modern domestic architecture which is

not open to the draw backs just alluded to. In the handsome residence just completed in Chicago suburbs, several photographs of which are here presented, we have an instance in which a high degree of artistic excellence is united with modern convenience and the supremely fit to result in a composition which stands forth with a note of distinction among the adjoining dwellings. The frontispiece shows a front view of the exterior whose lines have been kept comparatively simple, though this facade is rather freely treated with ornamental detail.



The setting of this spacious and handsome house is generous as it should be, and the fine trees grouped about the grounds and near the house lend the atmosphere of dignity and of warmth which nothing but an environment of fine trees can convey. Nothing perhaps in the planning of a handsome house is of quite so much importance as its setting—the relation of the house to the site on which it stands, and here the cold mansions of England as well as its cottages, are illuminating commentaries on the value of this principle.

This house is built of a soft wire cut, or rough face brick in a number of shades of green, and blending perfectly with the green tile of the roof, reminds the passerby of the green and purple slate roofs which crown the brick manor houses in the valley of the Loire, producing picturesque effects of great beauty. This particular color blend of brick has the unique distinction of being the only building in Chicago in which it is used. It affords an admirable background for the white trim, which has enriched it with an unsparing hand, and of which probably the most marked and important feature is shown in the illustration giving the detail of the front entrance.

Square pillars of the rich, oriental brick, terminate in square caps of white terra cotta. These in turn being crowned by terra cotta urns, filled with flowers and vines which are to trail down the pillars beneath. The faces of the square terra cotta caps are embellished with unusual and distinctive ornamentation carrying German suggestion, and the same ideas are further applied to the treatment of the brick buttresses enclosing the entrance steps. A very striking example of lattice ornamentation is

employed on each end of the front facade. All of the trim is white glazed terra cotta. This includes the belt courses, the chimney caps and the urns on the front porch. The exterior wood trim is all painted white to match the terra cotta. The brick is a soft wire-cut, or rough face brick blending in a number of shades of green. The color scheme of the exterior, therefore, is green and white, the iron fence and tile roof also being green. The trellises which are shown on either end of the house will be covered with climbing rose bushes so that with the abundant green foliage for a setting, the color scheme of white and green is beautifully carried out in detail.

The designing of this residence presented from the Architect's point of view an exceptionally interesting problem, because of the fact that it is located on the northwest corner of a street intersection and it was not only necessary to place the dining room on the east or street, corner of the house but the kitchen and service wing also. It was also necessary to provide for an automobile entrance from the east.

It was of course impossible to have an entrance on the east side and separate the dining room and kitchen. This problem was solved, as you may notice, by placing the porte-cochere on the rear with an entrance from the side street, which also serves as a service drive for the iceman and the delivery men. A concrete circle was placed in the back yard which permits of the turning of machines and wagons.

The design of the exterior may be characterized as modern American Residential. Of late years a distinct style has been developed, of which this is an example. The primary intention is to carry out the idea of breadth by emphasizing the horizontal lines. The cornice is heavy, the roof is unbroken by dormers, and the belt courses, all accentuate this feature.



The finely designed Colonial staircase treated in white enamel and mahogany.

The entrance through the brick porch gives upon a very beautiful interior, in which unusual features are introduced with taste and a feeling of refinement. While only fourteen feet wide, this hall



Vista into library showing fireplace of Gothic design.

by reason of its perfect proportions, gives an effect of spaciousness and beauty. Much skillful handling of this space has been employed, particularly in the handling of the finely designed, Colonial staircase and landing, treated in white enamel and mahogany. The graceful curves of the stair and rail converge charmingly into the balustrade of the wide landing, which stretches quite across the width of the hall and is fitted up with a seat in white enamel, running beneath the group of windows which is richly cushioned in mulberry velvet. Under this seat are cunningly hidden the radiators, which perform their office through bronzed grilles in front.

The pure Ivory paneling of the hall is enhanced by the soft tone of mulberry which glazes the wall surfaces and by the deeper, richer shade used in the hangings. This color effect is still more lovely as carried out upon the ceiling where the soft glow from the porcelain of the indirect lighting fixture is reflected upon the delicate plaster ornamentation and the rose color of the ceiling.

The lure of color does indeed form no small part of the success of this adventure in house building for its lovely soft quality pervades all the rooms. By its discreet use, warmth is imparted where there might otherwise have been a feeling of coldness in the presence of so much white enamel and the use of glazed walls. The detaching of the heavy cornice and of the lovely columns while simple is elegant, and this hall is a felicitous introduction to a beautiful home.

One other detail is worthy of note—the drinking fountain, which is visible on one of the walls near the stairway. The figure of this fountain is a beautiful bit of marble depicting a boy and girl,

floating a small sail boat, which is set at the water's level in the fountain. The rich coloring of the rugs on stair and floor furnish the additional color relief in this beautiful hall.

The library, which opens off the hall, at the right, serves also as a reception room and is finished in mahogany with a fireplace of terra cotta in Gothic design extending to the ceiling. This fireplace is of a beautiful shade of greenish blue, very soft in texture, and with the mahogany woodwork, is an admirable contrasting color note.



View of rooms showing the beautiful symetry of design.

The dining room, which is on the southeast corner of the house (the house facing south) is, like the balance of this floor, finished in white enamel, the paneling extending to the head casing of the doors. The cove cornice, above the paneled wainscoting, was covered with aluminum leaf, over which was wiped or stippled a dark blue flat paint, just heavy enough to fog the silver. The effect, particularly under lamp light, is especially beautiful.

The fireplace and mantel are pure white of classic design and Skyros marble of white and gold is used for the facing and hearth. All of the hardware, including the electric fixtures, is in dull gold or brass, and the hangings and rugs are a rich dark blue, which again contrasts agreeably with the ivory of the woodwork while the touch of dull gold lights up the color scheme.

All walls throughout the house have been covered with muslin and then painted and stippled. All of the woodwork shown, and in practically all of the rooms, is six coat white enamel rubbed to an egg

shell finish. All of the wall surfaces of the stair hall and landing, and upstairs hall, are glazed with a delicate mulberry shade which contrasts softly and restfully with the ivory enamel.

Different color schemes were used for the principal rooms upstairs and living room, all of which were worked out with stenciled panels and borders on glazed, muslin covered walls.



Dining room has a high paneled wainscot.

A unique feature of the house is the convenient entry at the right of the main stair hall, this rear entry and porch serving as an automobile entrance direct from the driveway leading to the garage. This permits of convenient and quick access to the waiting automobile without being exposed to the weather. The stairs under the main landing and from this entry lead down to the basement billiard room, which is intended for billiards, dancing and a general lounging and amusement room. An elevated seat, reached by two steps at the east end of this room permits the spectators to have an elevated view of the billiard table.

The owner's room and sleeping porch, dressing and bathrooms, form a delightful suite on the southwest corner of the house, which is the direction from which come the prevailing winds throughout the summer. An additional servants' room is located on the third floor, which is not shown on the plans, and a room and bath for chauffeur are provided in the garage, having accommodation for three cars.

Another unique feature of this resi-

(Continued on page 113.)

Sofas—and How to Use Them

How the Sofa Can Be Used to Best Advantage and Why It Has Its Place Even in the Smallest Room

William B. Powell

THE history of that sofa of yours—now probably relegated to the attic—would furnish a wealth of interesting material and carry you back to the days of Nero, when the banquet couches played an important role in the life of the old Romans. Yes, the sofa has always been an important furniture factor but. about the time that those "pink and white" reception rooms and period furniture sets came into vogue, the sofa degenerated into merely a stiff, uncomfortable article and often into a silly little tete-a-tete. Once in a while we came across an old fashioned walnut sofa covered with black horse-hair. but these, the only really comfortable kind, were usually "ousted" in favor of the frail newcomers.

Happily, we have outgrown most of the elements, such as tete-a-tete, which belonged to the ginger bread period. People have learned the comfort to be had from a good "sinky" couch and also the decorative value of it. But a great many cottage, flat, and small house dwellers



The "right angled" position for a small room.—Note the reading lamp and tabaret.

rather hesitate to use couches fearing that it will dominate their small rooms. Of course this would be so if one went ahead and purchased a seven-foot couch for the average small living room. But there are many couches to be had which are built on good lines and yet also are in proportion to the room—if properly placed. That is the secret. If you are careful in the placing of your couch, it will not be in your road nor take up too much room.

The first place to which one naturally turns in placing a couch is with the back to the wall—and I grant that this usually is the best place for your couch. But it is not the only place by any means. Let me suggest a few good positions. In a room with a fireplace the logical place for a couch is either in front of the fireplace or else coming out at the side of it at right angles to the wall. If the room is large enough, it is best to place the couch in front of the fireplace and it is always attractive to have a table directly back of the couch—the table of course to have books, magazines and a large reading lamp. This arangement gives you a good centre to work from and the arrangement of the rest of your room will naturally develop. For instance you will very likely place a comfortable chair by the side of the table and perhaps a small rocker at the end. The table then has a real use, it will be a mecca for the family to gather about to do their reading. If you haven't an appropriate large lamp, use smaller lamps at each end of the table. They should have the same shades, and be of the same height. If possible, use duplicate lamps.



Solid comfort in front of the hearth—The long table can stand two rather than one center lamp.

Now you do not necessarily need a large room to enjoy this arrangement of a "before-the-fire-couch. "You often find a fireplace at one end of a room instead of at the side. Then, too, in those apartments whose rooms open into each other in a long row, some of the tenants are wise enough to throw open the dividing doors, or else omit putting up portieres, and thus evolve one long room of character rather than two rooms so small that they do not lend themselves to attractive treatment. With such an arrangement I have often found it possible to place a couch before the fireplace which usually is at one end of this double room.

In a room which is square in shape with not sufficient space to allow your placing

a couch in front of the fireplace, the place for it is either directly at right angles or else "cati-cornered" at one side of the fireplace. I have in mind a rather small room where an air of spaciousness was secured by this right angled treatment. The corner back of the couch was made useful by placing in it a desk and desk chair. The desk had a lamp on the top and a small table with a fern on it, in the window. Many people might have thought the space too small for anything but a chair, but by using small sized furniture, one gained the effect of a little writing room on looking beyond the couch towards the corner.

Another favorite position for a couch is the corner. When so used it is a good idea to place a standing lamp back of it. If you haven't one of these lamps you can use a small table or stand large enough to hold a lamp.

If you use a couch in the usual way—against the wall—do one of the following things. Place a standing lamp at one end—have a table next to one end and a lamp on it—or use a low magazine or smoking table. These adjuncts will help materially towards making a more livable room—and after all, you will find that the room which is most attractive is really the most livable and made up of these comfortable groupings of furniture and furnishings.

It may be that you have an old couch which you wish you could use and which you think is too worn in upholstering or in woodwork to warrant the expense of renovating it. But there is a way to get around this. Some of the most attractive couches I have seen have had a slip cover made of chintz or cretonne. These materials are very much in vogue and are being used in the smartest homes. More-

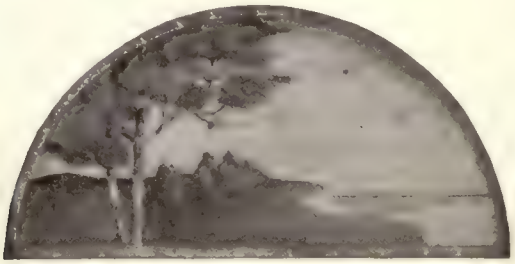


What a pity not to have a couch before or at the side of this fireplace.



An old worn couch made new by a chintz cover. Note the clever way the space back of the couch has been utilized in this small room.

over it is a surprising fact that for once there is a fashionable article that is also cheap! These covers are, of course, most desirable when the same chintz or cretonne have been used for hangings or as coverings for chairs in the room. But if you have never used this material, here is your chance to try it out and receive a pleasant surprise. Take your old couch and make a slip cover for it and two chairs in the room. These three pieces of furniture covered in the same goods will be sufficient to give an appearance of unity and it will not be necessary to use the goods for hangings and coverings for the other pieces of furniture. The slip covers can be made either plain or with a flounce. Both chintz and cretonne are easily washed and you will find them a wise investment. Your old couch will blossom out into a "thing of beauty and a joy forever."



The Modest House

Eleanor Allison Cummins

A PIECE of work has been done in connection with the Pratt Institute, in Brooklyn, which is of incidental interest to the many people living in city houses of an unpretentious and inartistic type, as showing what can be done with just such houses in the hands of people with common sense and good taste.

A three-story, attic and basement frame house, one of a block, but with end windows on a side street, has been decorated and furnished, and is used as a club house by the students of the various women's departments in the Institute. The house is of very moderate dimensions, and of an absolutely commonplace type, such a house as can be duplicated over and over again in the eastern cities. Externally it is nothing at all to look at, in no way to be distinguished from its neighbors on the same block, and is painted as they are a light drab. At the side and at the back is a small yard, inclosed by a rather high wooden fence, trellised for the roses which have been planted but at this stage blossom in anticipation only. A wide bed of old fashioned flowers, wall flowers, sweet William, candytuft, stocks, nasturtiums and a dozen other familiar sorts follows the line of the fence, and at one corner a flight of steps leads up to the gate into the campus of the Institute.

The color scheme was chosen with two ends in view, one to increase the apparent size of the rooms, no one of which is more than fifteen feet square, the other to make a good background for the pictures, flowers, pottery and metal which will from time to time become permanent possessions of the house. Both of these ends have been met by the use of varying tones of grayish brown or brownish gray, ranging from the putty color of most of the walls to the



The blue and gray room of the Library School.—Note the octagon-shaped table.

fumed oak of the furniture. A single important structural change was made. This was the cutting out of the chimney at the rear. The installation of a gas range in the kitchen made this second chimney useless, and its elimination gave perfectly square rooms at the rear of the house, with a long wall space, valuable in rooms whose other sides are much broken up.

Throughout the house the woodwork is ivory white, the floors are hardwood and the electric lighting is from the sides of the room, the simple fixtures being a very little above the eye line. The furniture, with some exceptions which will be noted is of a light shade of fumed oak. The house is heated by steam and the radiators are placed under the windows, with seats built over them. The limitations of space made the elimination of fireplaces, except in one room almost a necessity. But the very limitations of the house make it the more interesting.

Passing from the street up a flight of steps, you enter a rather narrow hall, with a door at the farther end leading to the back piazza. The walls are painted putty color and both hall and stairs are carpeted with a thick piled brownish gray carpet with an indeterminate figure of geometrical lines in a darker tone. A very simple oak hat rack and mirror and three reproductions of Holbein portraits in red chalk are here, and a corner at the rear has been utilized for a tiny lavatory, shut off by a curtain.

At the right of this hall are the two reception rooms, with the same putty colored walls and white woodwork and connected with each other by wide sliding doors. These are pushed back and this and the other doorways are filled in with portieres of a double-faced tapestry with a Renaissance design in two tones of grayish brown. These hangings are edged with a very heavy cord of the same tone. At the windows are curtains of thin silk, light apricot in color, and the cushions of the window seats are of corduroy. Taupe, or moleskin are the words which best indicate the color used for the upholstery in these rooms. The rugs are of the carpet used in the hall, with a six-inch border to match.

The furniture is mostly upholstered, in very simple shapes, the covering of velour, but there are several small chairs with seats of embossed haircloth of the same general tone, and cane backs. Between the windows in both rooms are simple desks and there is a semicircular Chippendale table in fumed oak. As yet the only pictures are three very fine Japanese prints, masses of beautiful color, in dull gold frames. The waste basket at one of the desks is interesting, quaintly shaped and finely woven of cane, bought for forty cents in the Chinese quarter, where it had been used for some sort of packing. In one of the upper rooms is a similar basket, but of a different shape, this having been used in packing tea pots and sold for thirty cents.

On the upper floors are the rooms devoted to the use of the members of the different departments of the Institute. Each of these rooms has its own special decorative note, yet the treatment of each room is such as to make it a harmonious part of the whole scheme.

At the rear of the second floor, and with a southern exposure, is the room of the art students. Here the wall is covered with a silk fibre paper of a little deeper gray tone than that of the painted walls, and the furniture is partly oak, partly wicker in a brown tone. The upholstery here is of a small patterned tapestry whose general effect is dull blue, and the blue is repeated in pottery jars on the shelf above the writing table. The pictures here are Japanese landscape prints in rather strong tones, and their green tones are accentuated by a large bowl of green pottery on a table in the middle of

the room. The rug is of the same gray carpet as that used below, and the window curtains are Sunfast, a changeable blue and old gold, hemstitched.

The front room on this floor, with two north windows and one looking west, is the one which is the most unusual of any of the group, and is that belonging to the students of Household Science and Art. The color scheme was derived from two old Spanish rugs in tones of orange and purplish red. The furniture in this room consists of a gate-legged table, a slat-backed arm chair and two fiddle-backs, all three with rush seats, antiques of natural maple. To these have been added a long settee, not at all unlike those used in Sunday schools, a small desk and a winged chair of wicker, these additions being stained to match the antiques. The window seats are cushioned in mauve velveteen or cotton velvet and the windows have net curtains with side curtains of orange Chinese silk. The settle is cushioned with orange cotton velvet, and the table supports a lamp whose base is a brownish orange Ming vase. It is mounted with iron and the shade is of orange paper with black ribs. The wall paper here is a gray, fabric effect.



The orange and mauve room.

The picture in this room are three, one a very beautiful color reprint of a Holy Family by Piero della Francesca, whose original is in Christ Church, Oxford, another a Japanese print of a woman, framed in black with a gold mat, the third a copy of Carpaccio's quaint picture of St. Ursula's dream. Both of the color

prints were varnished before being glazed to deepen the tones of the coloring, and the frames of both are rather ornate ones of bronze.

In this room and the corresponding one on the floor above the chimney projects into the room perhaps eighteen inches. The mantel piece was removed and the opening filled up so that the face of the projection is quite flat, the surbase being carried around it.



Serving tea in the basement dining room.

The room of the Library School has a northern exposure and a side window, and a paper with a sort of woven splint effect in blue and gray. The rug is an East Indian drugget in blue and gray and the furniture wicker, in the natural color, Chinese cane with the exception of a long Craftsman settle cushioned in dull blue. The table is interesting, an octagon with moulded edges and four legs cross braced at exactly the floor level, and it has a square cover of canvas printed in blue, gray, yellow and apricot with touches of black. The window cushions are gray corduroy, the curtains of white crepe with embroidered figures in green and blue and the walls are adorned by three Holbein drawings of women's heads.

The attic staircase is separated from the lower hall by a door and is carpeted with green denim. At its head is a small bedroom, used by one of the residents, ceiled and walled with white painted wood and not unlike a ship's cabin. This is furnished in brown wood, has a gray and green rug, a green couch cover, a green covered screen and many cushions of bright hued chintz. The open spaces around the stair head, used for the hanging of clothes and the storing of trunks, are curtained in with a very decorative chintz, a confusion of blossoms in pink, lavender and blue tones.

The dining room in the front basement has small tables and light chairs and is used principally for the serving of tea and for chafing dish suppers. It has a bare polished floor and painted walls, and at the back, on its only long wall space is a set of recessed shelves, answering the purpose of a sideboard, brave with brass and copper and blue china.

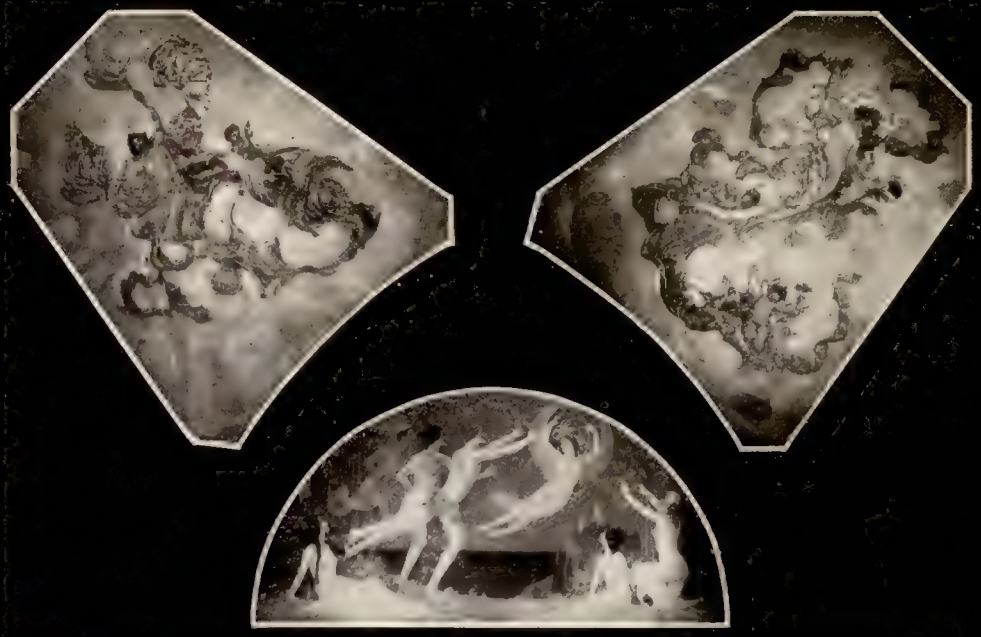
It seems to the writer that this house is interesting as a practical example of the applications of the principles of simplicity, of harmony, of coloring and of wise restraint in the use of ornament; principles whose practice is essential to the successful decoration of the modest house, which is all that most of us can afford.



THE SISTERS

A little glimpse into the home of a substantial citizen of Holland—the country which has been called the cleanest, the most wholesome, and the most picturesque in all the world.

This picture, a reproduction of the original in oil, is the work of that distinguished Dutch artist, N. Van Der Waay, of the Academy of Fine Arts in Amsterdam. It well reflects the admirable characteristics of that practical, industrious and home-loving people.



MURAL ART AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION

The illustration at the top left-hand corner of the page is one of four representing "The Four Golds of California" placed in the dome of the Palace of Fine Arts. This one represents "Golden Metal and Its Dominating Influence." Decoration is by Robert Reid. Opposite in the right-hand corner is another panel of the same group representing "Poppies," also by Reid.

Just below, in the semi-circular shape, is reproduced the first of the score of great mural paintings by noted American and English artists to be given permanent place on the external walls of the beautiful festival courts of the Exposition. This decoration, "The Pursuit of Pleasure," is by Charles Holloway.

In the lower left-hand corner is shown "Festivity," one of the ten exquisite outdoor mural paintings by Milton H. Bancroft, adorning the walls of the Court of Four Seasons. Opposite is given "Winter," by the same artist. Mr. Bancroft, who is noted for his master of detail and for handling of the nude in mural art, has many scores of mural paintings to his credit throughout the United States, but it is believed that the ten canvasses which he has executed for the Panama-Pacific International Exposition show him at his best.







The two panels shown at the top, "Seed Time" at the left and "Harvest" at the right, are also by Milton H. Bancroft. They adorn the Court of the Four Seasons. The two center panels, representing "The Conquest of the Pacific," are by Frank Vincent DuMond, and are to be placed beneath the arch of the Setting Sun, the approach from the west to the Court of the Universe.

In the upper panel, Youth is seen bidding goodbye to his people and his eastern, snow-bound home, and following the lure of Plenty and Adventure. In the lower panel is shown the arrival on the golden shores.

Two more murals by Bancroft are shown at the bottom. At the left, "Art Crowned by Time," which is also placed in the Court of the Four Seasons, and at the right, "Man Receiving Instructions in Nature's Laws," which is placed at the west entrance to the colonnades leading from the half-dome in the Court of Palms.

Planting a Forty Foot Lot

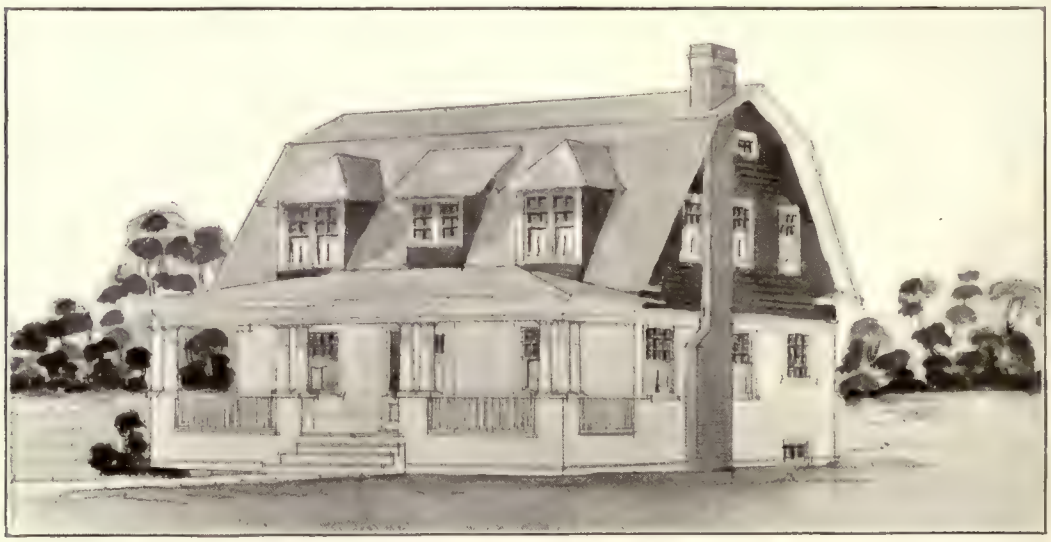
Wyman P. Harper, Landscape Architeet

IN this article is given a planting plan complete in all its specifications so that any one may purchase his plants and by following the directions as laid down, be reasonably sure of securing a most satisfactory result.

A house and lawn suitably planted with trees and shrubbery has a homelikeness and beauty impossible without them and all out of proportion to their cost and care. The purpose of the plan under discussion this month is to arrange for as much unbroken lawn as possible but ornamented with such shrubbery as will help the appearance of both house and lawn. A good lawn is the first essential but without planting, it and the house are nothing to what they might be with planting properly chosen and arranged. As will be noticed, the shrubbery first clings close around and against the house, making a close union between it and the ground; otherwise any house appears like a box set down on the lawn. This planting makes the same finish to the appearance of a house that a necktie and collar do to that of a man. The rest of the shrubbery acts as a border to the lawn and as the eye looks across the lawn it rests upon an interesting group of planting instead of somebody's ash-barrel or garbage can, to which the lawn otherwise, because of its smoothness, would inevitably call attention.

The planting itself should give some variety without becoming a museum of plant specimens which would look ragged and artificial, the plants chosen of a character that when mature and even after the first growing season will be of a size and height to fit the place where they are standing without pruning.

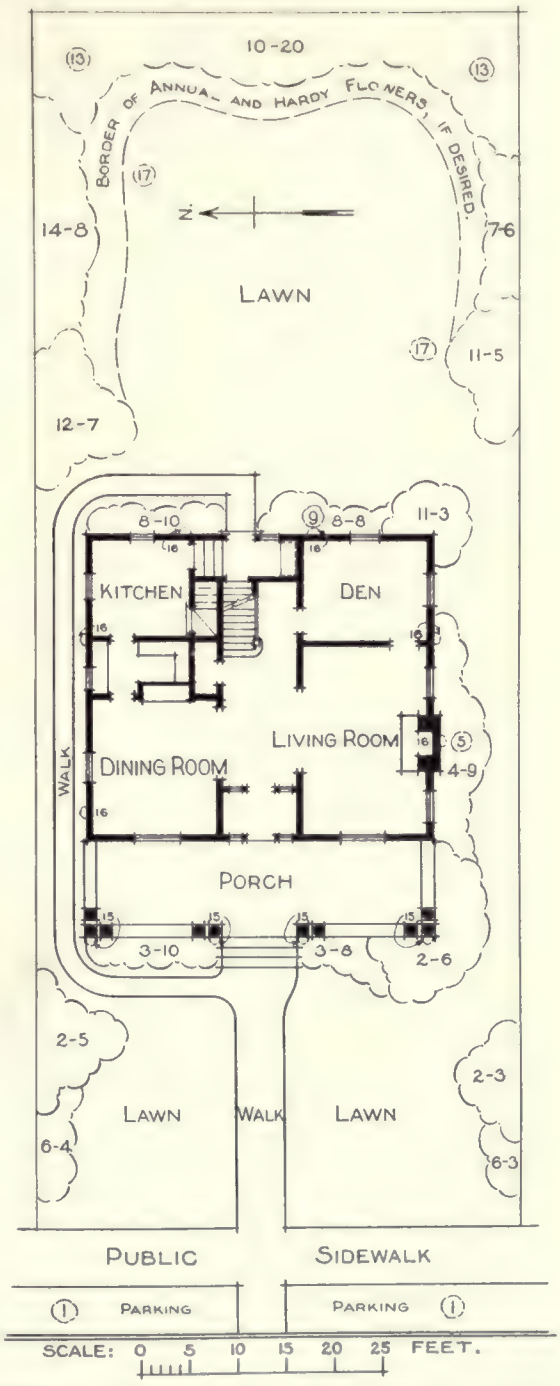
On the next page is shown a planting plan for a medium size city lot, which, with a little adaptation, will be found applicable to any lot of similar size. This is an ordinary inside lot, 40x120, with the



Residence planned for a forty foot lot.

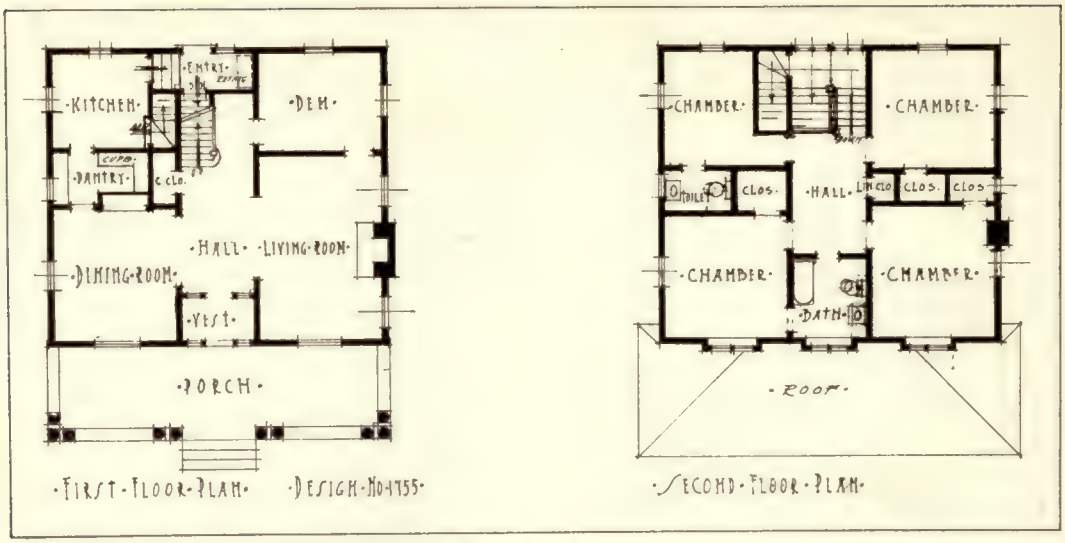
Planting List.

1. American Elm (Ulmus Americana), 2 plants.
2. Bridal Wreath (Spiraea Van Houttei), 14 plants, 4 feet apart.
3. Japanese Barberry (Berberis Thunbergi), 18 plants, 2 feet apart.
4. Hardy Hydrangea (Hydrangea p. g.), 9 plants, 3 feet apart.
5. Tree Lilac (Syringa Japonica), 1 plant.
6. Ash leaved Spiraea (Spiraea sorbifolia), 7 plants, 3 feet apart.
   Or (For St. Louis and South)
   Regel's Privet (Ligustrum Regelianum).
7. Weigela (Diervilla rosea), 6 plants, 3½ feet apart.
8. Indian Currant (Symphoricarpus vulgaris), 18 plants, 2 feet apart.
   Or (For St. Louis and South)
   Dwarf Deutzia (Deutzia Gracilis).
9. Snowberry (Symphoricarpus racemosus), 1 plant.
   Or (For St. Louis and South)
   Rose of Sharon or Althea (Hibiscus Syriacus).
10. Mixture of Lilacs (20 plants), 4 feet apart.
    Common Lilac (Syringia vulgaris), 5 plants.
    White Lilac (Syringia vulgaris alba), 5 plants.
    Persian Lilac (Syringia Persica), 5 plants.
    Hugarian Lilac (Syringia Josikaea), 5 plants.
11. Lemoine's Syringa (Philadelphus Lemoinei), 8 plants, 4 feet apart.
12. Tartarian Honeysuckle (Lonicera Tatarica), 7 plants, 4 feet apart.
13. European Mountain Ash (Sorbus aucuparia), 2 plants.
    Or, American Mountain Ash (Sorbus Americana).
    Or, Oak-leaved Mountain Ash (Sorbus quercifolia).
14. Siberian Dogwood (Cornus Sibirica), 8 plants, 4 feet apart.
    Or (For St. Louis and South)
    Fortune's Golden Bell (Forsythia Fortunei).
15. Coral Honeysuckle (Lonicera sempervirens), 4 plants.
    Or (For St. Louis and South)
    Wistaria (Wistaria Chinensis).
16. Engelman's Woodbine (Ampelopsis Engenmanni), 6 plants.
    Or (For St. Louis and South)
    Boston Ivy (Ampelopsis Veitchii).
17. Hackberry (Celtis occidentalis), 2 plants.
    Or (For St. Louis and South)
    Tulip Tree (Liriodendron tulipfera).



house placed a little nearer the North lot line than the South. Had the house faced East instead of West as it does in the plan, the house plan would then have been reversed in all its details, so that the living room would still be at the South and would front just as it does now.

The entire area where the planting is indicated is to be dug up solidly for a depth of eighteen inches and if the soil



is not as good as one would have it for an ordinary vegetable garden, it should be replaced with such soil as will make it so. If the soil is sandy, the first four inches of the eighteen should be yellow clay, if obtainable. Then the plant-beds at the proper season are themselves to be planted solidly with the plants indicated, at the distance apart shown in the Planting List so as to be distributed evenly. The kind to be planted as a group in any area is indicated by the first of the two numbers connected by a hyphen, for example, 2-5 means that the plant indicated by No. 2, which is the Spiraea Van Houttei or the Bridal Wreath according to the Planting List, is to occupy that entire space and that it will take five Spireaen Van Houttei to do it, if placed four feet apart, the spacing specified in the Planting List. Where only one plant of a kind is to be placed anywhere, it is shown by a circle with a number inside indicating the kind.

The plants should be watered during planting or just after they are planted so that the earth is thoroughly soaked below the bottom of the roots and for the first growing season they should have a similarly thorough watering every week or so, except during a rainy period. This is more necessary in the Western than in the Eastern States. Planting may be done either during the Spring or Fall seasons when the plants are dormant and when the ground can be cultivated. The root is the part requiring the greatest care and should never be allowed to dry out. If it is not convenient to plant the stock the day it is received from the nursery, it should be taken from its packing and the roots placed in the ground. If a plant is bought with the roots dry, its chances of life are small. When planting, tramp the earth tightly around the roots with the foot to further decrease the likelihood of the roots drying.

Estimate of Cost.

Cost of Plants.		
6 trees @ $2	$12.00	
127 shrubs and vines @ 25c	31.75	
10% additional for freight and package charged extra	4.37	
		$48.12
Cost of Preparation of Soil (Omitting cost of extra black earth and clay if needed).		
1 man digging 1500 sq. ft. plant beds 6 days @ $2	12.00	
1 man planting trees and shrubbery 2 days at $2	4.00	16.00
		$64.12

Adapting Different Floor Plans to Similar Exterior Treatment

KEITH & PURDY, Architects

THE possibility of development in floor plan arrangements of an entirely different character to come within the same specified ground area calls for the exercise of considerable ingenuity on the part of the designer. Good and unique variations in the plan will be the result of the experience and training of the architect.

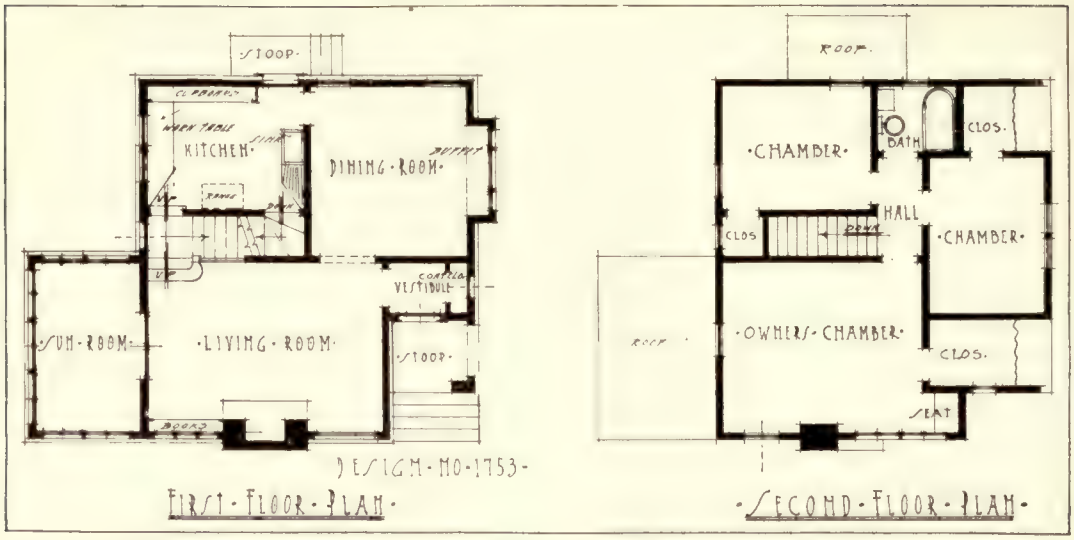
An illustration of what may be accomplished along these lines is presented on these pages in the two designs of an English stuccoed cottage. Both of these houses are almost identically the same size on the ground and of the same general exterior type, yet, through careful study radically different floor plans have been worked out, each of which have considerable merit, and it would be difficult to say definitely whether one is better than another—it being generally a matter of choice. To those who are partial to the living room extending clear across the face of the house, the first design will probably be better liked.

Entrance, slightly recessed, is to the side, sheltered by the projection of the main roof. A coat closet is always a desirable convenience, and should be provided when it is possible to do so. In the plan in question where the vestibule has double doors, it is not always well to have the coat closet open off of vestibule unless the vestibule is real large and heated. In this case the front door opens into a little "L" of the living room, which is termed vestibule, and the coat closet is conveniently arranged at the end.

After getting inside this house, one is



Entrance, slightly recessed, is to the side, sheltered by the projection of the main roof.



at once impressed with its coziness and the opportunity, with modest furnishings, to make it an ideal home. There is an attractive brick fireplace with bookcases on each side, artistic in its design, and yet very simple. There are French doors opening onto a fair-sized sun porch and just to the side of the approach to the sun parlor is located the stairs, and there is ample room on this inside wall between the foot of the stairs and the cased opening in the dining room to place a good-sized davenport, or this would be a good position for the piano and put the davenport against the other wall, which will bring it somewhat closer to the fireplace.

The dining room is well proportioned and of good size, and with plate rail, paneled wall and built-in buffet, will be most complete. Nothing has been overlooked in the arrangement of this kitchen, though none of the equipment is expensive, but everything is right up to the minute in its cupboards, work table, space for refrigerator, the sink and gas range—a place for everything.

The owner's chamber is the principal room on the second floor, and is handy to the bath room. There are two other good-sized chambers, and all are well provided with closets. One detail of the owner's room which should be mentioned is a small seat under the casement windows.

Just a word about the basement. It extends under the sun room as well as the house proper, and is provided with the usual fuel bins, carefully enclosed so as to eliminate the objection to coal dust, which is quite a problem to contend with, every time coal is delivered, unless the bin is sealed pretty tightly. Even though coal is generously wet down when it is shoveled into the bin and with the best of precaution, a fine coal dust seems to get into the air, not only in the basement but comes right up and settles on the floor and furniture of the rooms above. So a tightly sealed coal bin should be provided.

Taking up the structural materials, you will note that a little brick has been used for the exposed foundation wall, porch and steps. Above, the structure is frame covered with metal lath and three coats of cement stucco. In the upper gables a little paneled work is shown and this same treatment is carried out on the dormer.

The interior woodwork to be the choice of the owner, and for a house of this character and size, probably birch for the standing finish and stairs, and pine, painted or enameled, above with birch, beach or oak flooring.

Another English Stucco Cottage

KEITH & PURDY, Architects

AS STATED in the opening of the preceding description, we have under consideration two houses of a similar type as to exterior, but with entirely different floor plans.

In this second English cottage, the entrance is to the front, directly into the end of the living room, and attention is called to the fact that the stairway, which almost opens off of this room, is protected against direct currents of draft whenever the front door is opened. A reversal in the position of the sun room has been made and an entirely different location given to the dining room, which opens from the living room by a wide casement.

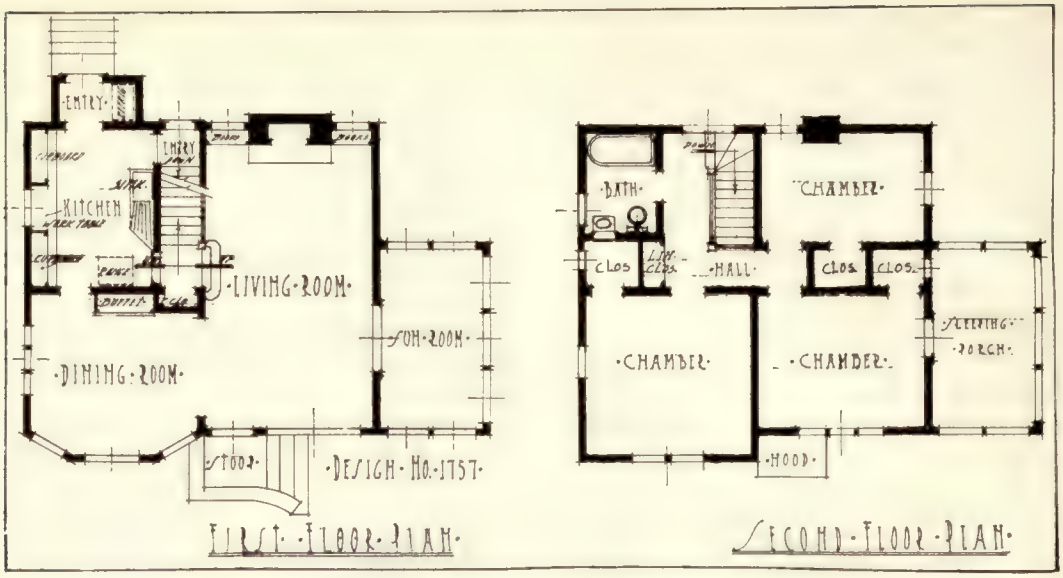
In this house we also have the brick fireplace with built-in bookcases and similar treatment of French doors onto the sun porch. There is a grade door provided in this plan at the top of the cellar stairs. The kitchen is equally well equipped, the refrigerator being accommodated in one end of the rear entry.

On the second floor, comparison will show that the chambers and bath are practically of the same size, but the sun room in the plan has been carried up to provide a splendid sleeping porch above.



Exterior treatment similar to preceeding design, but a different floor plan.

We would like to suggest for a color scheme that the brick work be a Golden Mottled Matt brick. This should be used up to the first story sills with a tan-colored Portland cement stucco above. The shingles may also be stained a dark tan, but if this color should not be desired, use a moss green. For the outside treatment, use a dark brown stain, and the whole will be found to harmonize and give a very satisfactory result.



A Small Two-Story Cottage

JOHN HENRY NEWSON, Architect

WE PRESENT a photograph view of a very small two-story house. The picture was taken a little too early in the spring before the leaves were out, and is therefore not quite as warm in its impression as it otherwise would be, for it is in reality a very charming and interesting little home.

This place will look quite differently when the grounds have been fixed up

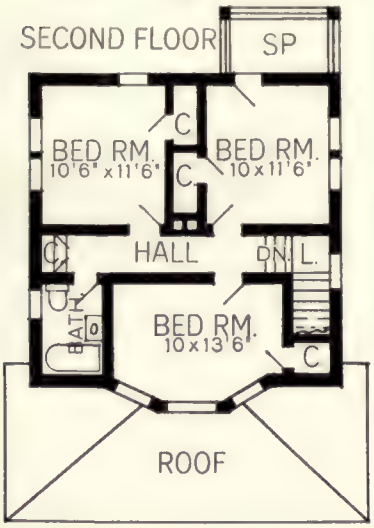


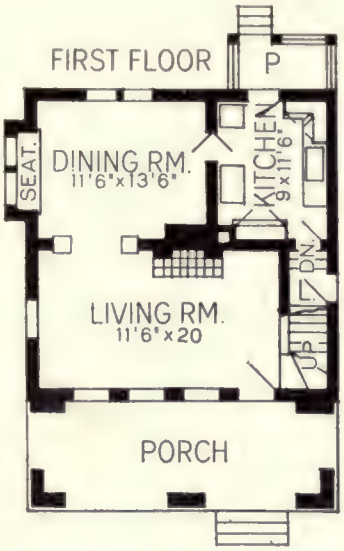
On the conventional square type, with simple hip roof.

and some shrubbery planted. The house is of the conventional square type, with simple hip roof, and is probably designed along the most economical lines possible. There is no waste room in the treatment of the floor plan. In a house of this size every square inch counts for a good deal more than it does in a larger house, and though oftentimes people think that because they are going to build a modest little home it is not necessary to bother with the services of an architect, yet the very fact of the importance of not wasting room would seem to emphasize the necessity of his services.

Everything is provided for the complete comfort of a small family, with three bedrooms and bath on the second floor, though this house is a little more than 24 feet square.

A designer gives the information that when this house was built, large shingles were used for the exterior wall in place of siding, and to hold the expense down wherever possible, the exposed chimney was cemented instead of using face brick. Another feature that will be noticed is the lattice supports to the porch in place of the usual square or round columns.





An Inexpensive Hip Roof Design

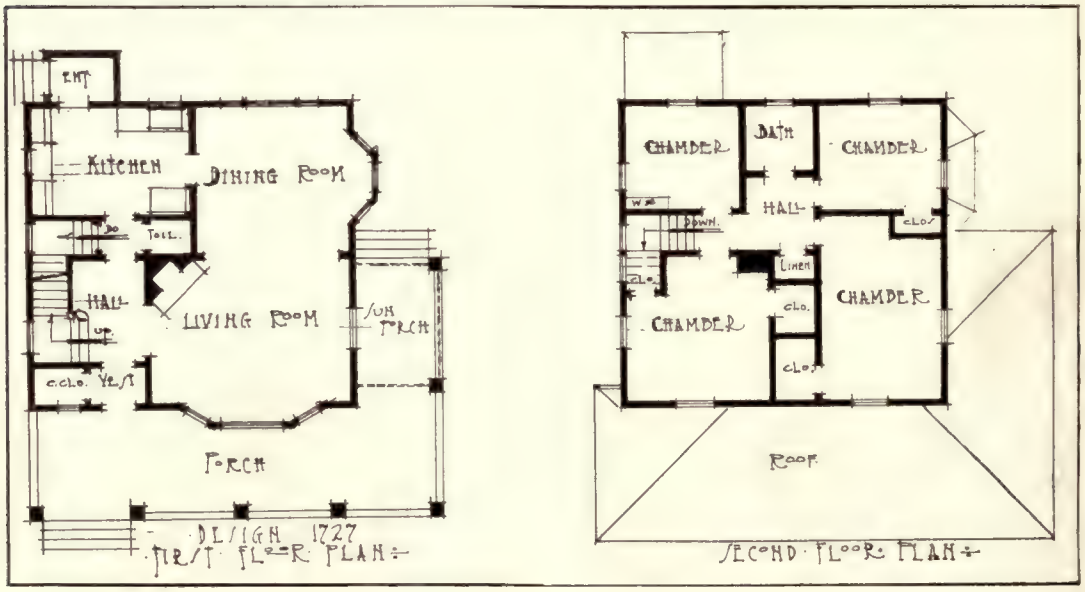
PROBABLY the greatest demand among home builders is for a medium-sized house that contains four bedrooms and can be built for approximately $4,000. To best meet these conditions, a house will want to be designed nearly square, and hip-roofed with possibly one dormer and no attic, excepting storage space reached through a scuttle. The design before us comes well under the above requirements. The porch is a very modest and attractive feature, extending across the front and returning to the side as a sun porch.

Treatment of the exterior walls is in rough-sawed drop siding, used up to the first story sills and shingles above. The design of the porch and columns of same is plain, along square lines, and it will be found an easy porch to screen in or



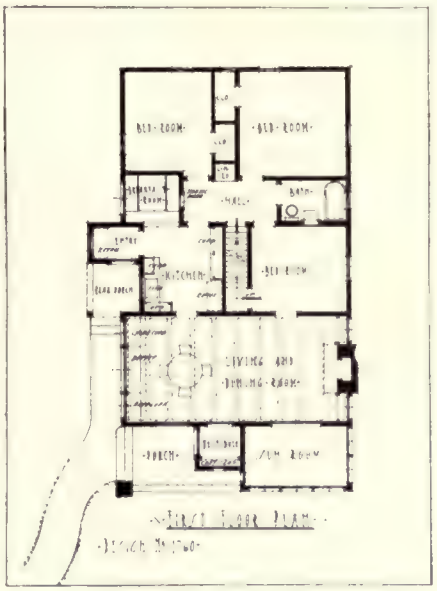
Treatment of exterior walls in rough-sawed drop siding, used up to first story sills and shingles above.

enclose in winter with storm sash. The interior arrangement is very practical. The living and dining rooms are scarcely separated, thereby securing the benefits of one fine large room. Two of the bedrooms are of good size, and two moderate in size. No room is wasted on this floor in unnecessary halls, and all bedrooms open conveniently to the bath room. We have to suggest that it would be possible to build this house fairly close to the amount mentioned, and to secure hardwood floors throughout, with a good grade of interior finish. Full basement, heating plant and standard grade of plumbing.



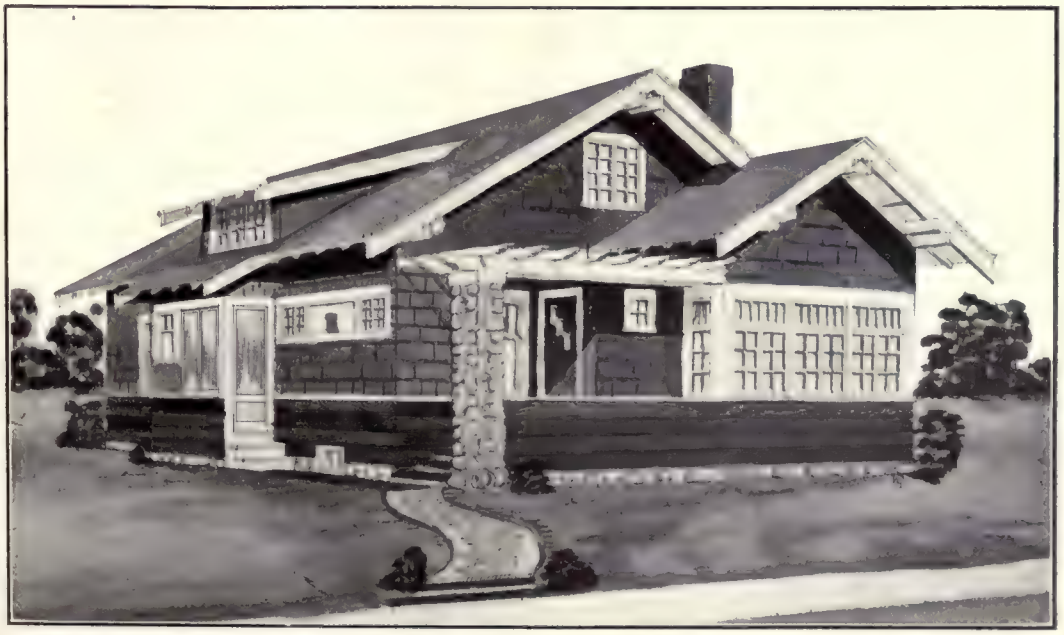
Attractive Exterior with Unusual Floor Plan

IN DECIDED contrast to the interesting homes preceding, we have here a combination of boulders, rough - sawed boards and side shingles, or shakes, as materials used in the building of this bungalow. The designer suggests a brick walk and brick steps up to the open porch covered with pergola beams. This porch, of course, will be covered as soon as growing vines have time to make a covering of Nature.



Here we have a large vestibule with coat closet accommodation and entrance into the middle of living room, which extends across the entire width of house.

This living room is a combination of dining and living room, and is planned for beam ceiling and provided with brick fire-place. There also are French doors which open from this room onto the sun porch. Where economy of space is also a necessity, as generally is the case in a bungalow residence, a combination living and dining room is a very happy thought, in fact, many people look upon an exclusive dining room as really unnecessary, for it would take quite a chunk out of the plan. This room, if separated entirely as a dining room, would hardly be less than 12x12. This is approximately



A combination of boulders, rough sawed boards and side shingles or shakes.

150 sq. ft. and would represent as its proportionate share of the cost, an investment of about $500. This would be about half as much as your living room would cost, and when you consider that you spend about one-fifth as much time in the dining room as you do in the living room, it will be seen from the standpoint of utility that the advantages of an exclusive dining room are not so important after all. This is particularly true where a small breakfast room may be provided for, adjoining from the kitchen. This room can be about the size of a rear porch; can have a built-in table and benches and serve as an eating place, at least for the early morning meal, and very likely for the luncheon in cases where the man of the house is not at home. This arrangement will save a great many steps for the housewife.

A good-sized kitchen has a rear entry and convenient side porch. Three good-sized bedrooms and bath room make up a most complete bungalow residence.

A Plain Substantial Home

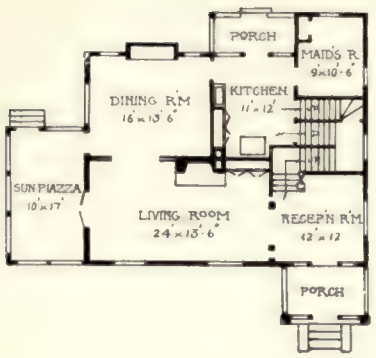
CHAS. S. SEDGWICK, Architect

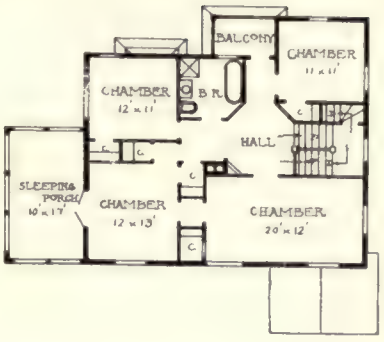
THIS illustrated home is one that was recently designed for a Western city. It is of the Italian type, with low-pitched, hipped roof, bringing the cornice well down, giving fine shade to the second story windows. The size is 38-foot frontage with 10-foot piazza, making total width of 48 feet and depth of 28 feet, exclusive of porches. It is estimated to build exclusive of heating and plumbing for $5,000 to $6,000.

It is designed for a south frontage, with the sun piazza on the west side. It is of frame construction, and the exterior cemented with "pebble dash" finish to grade line. The "glazed-in" porch entrance is on the right and opening into a reception room 12x12 ft., with main stairs opposite, leading to second story and with combination stairs from kitchen in the rear. The main living room is 24x13 ft. 6 in. at the left of the reception room, and connected with wide-columned arch. There is one central chimney with broad fire-



Of the Italian type, with low-pitched, hip roof.





place in the living room and book shelves at the right of same. The dining room connects with the living room back, and is 16 ft. by 13 ft. 6 in. These two rooms open onto the sun piazza which is 10 ft. by 17 ft. with French windows. The kitchen is fitted with cupboards and has a good rear porch and also a sleeping room 9 ft. by 10 ft. 6 in. This floor is finished in Washington fir in mission brown and oak floor. There is a full basement under the house complete with laundry.

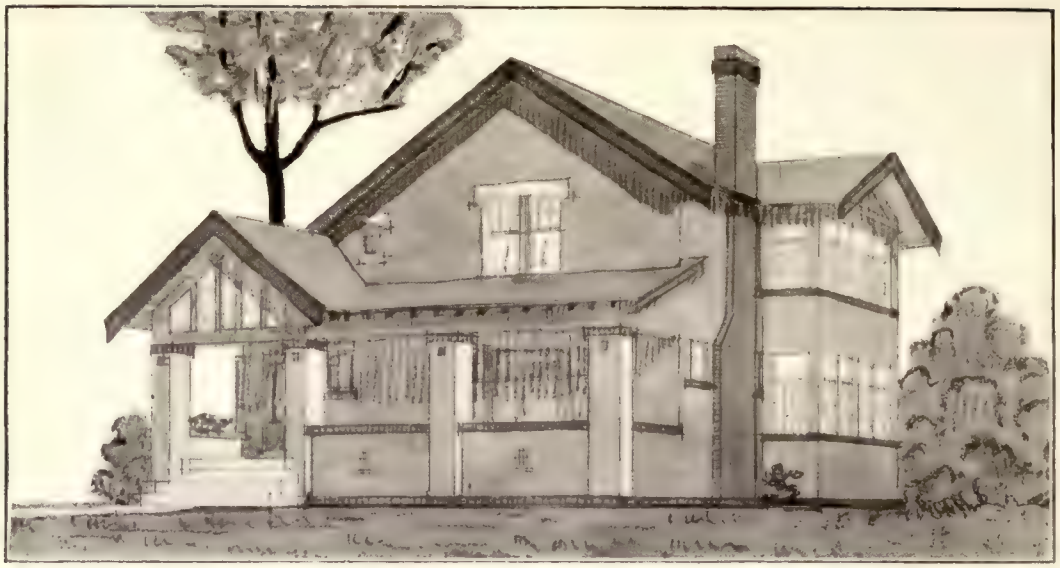
The second floor has four good chambers, entered from a symmetrical center hall that is liberal in size, and each room has one or more large clothes closets. A rear door from the hall opens onto a balcony. The bath room is fitted up with modern fixtures and shower bath and is 8 feet by 9 feet in size. Over the sun piazza is a sleeping porch the same size as the piazza and connected by French window with one chamber. The finish of this story is in white enamel with red mahogany doors and natural birch floor. The attic story is not finished, but is left open for storage purposes. The roof is low-pitched, shingled and stained with red. The overhang of the cornice is 3 feet in width, with rafters showing on the underside and painted white together with all other outside trimmings.

Constructed on Substantial Lines

THE substantiability of a house is of even more importance to the owner than the consideration of the aesthetic side, though there is no reason why the artistic and the substantial should not go hand in hand.

This house was planned for a client who was very particular about observing the substantial side of the program, and did not want to go into any elaborate detail, but wanted a well-built house set on concrete footings and a slate roof. He must have the walls hollow tile, faced with brick, and the porch floors and steps concrete; certainly very substantial materials throughout. He said he would rather pay for material than frills. In this connection I might say that the second story could just as well have been constructed of frame, using metal lath and cement stucco, as the more expensive tile work and the results quite as satisfactory at less expense.

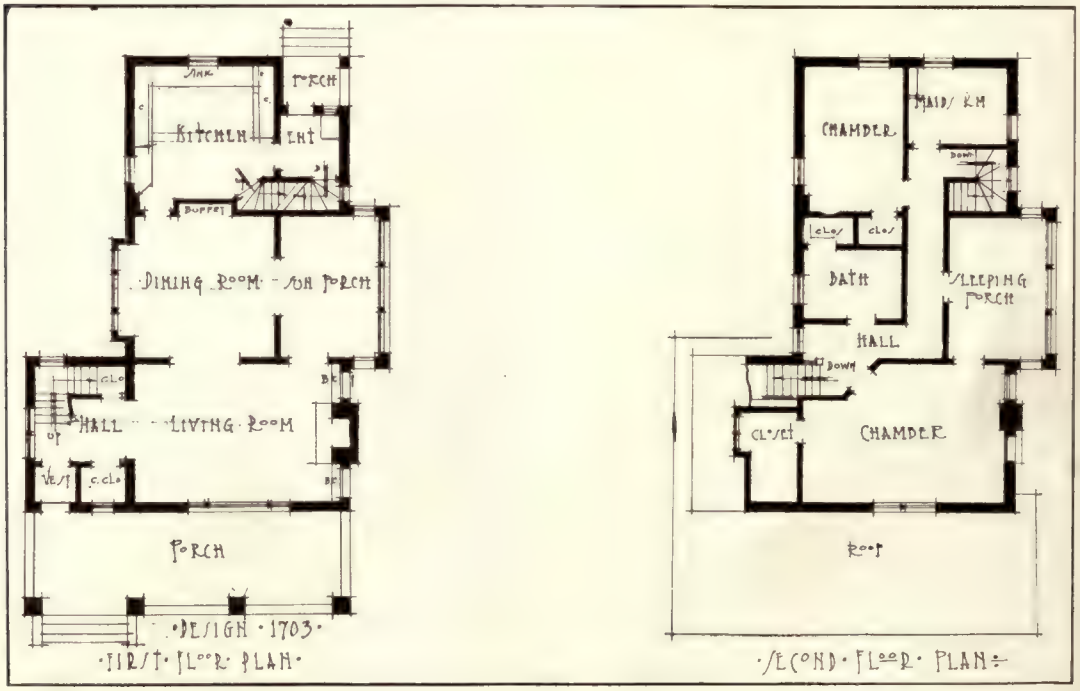
It was consented by the owner to build the dining room bay of frame; this bay supported on brackets. The sun porch was carried up to the second story to provide a sleeping porch. A further suggestion is made that will enable the use of this design on a narrow building, to



An admirable combination of the artistic and the substantial.

slightly increase the living room and omit the projections of the hall, as it is planned for this house. This enlargement of the living room could be made by extending the right hand wall out flush with the sun room and then run the stairway up directly out of the living room.

The dining room has a built-in buffet, and is planned for a beamed ceiling with a paneled wainscot and with the French doors opening onto the sun porch, makes a very light and airy room. A specially good-sized kitchen was planned, and the same was provided with built-in cup-



boards. It has a small entry from which leads a stairway into the basement. Up over this stairway is the back stairs to second floor.

The specifications for interior finish calls for oak on the first floor, excepting kitchen, which is pine, enameled. The standing finish of second story is birch. Bath room has a tiled wainscot. Flooring was oak downstairs and maple on the second floor. The entire cost is estimated at about $8,500.

The Unpretentious Frame Cottage

F. E. COLBY, Architect

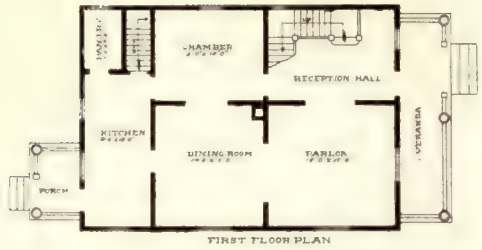
AS THERE are very frequent calls for designs of moderate cost, story-and-a-half cottages, we are pleased to present a photo view of an inexpensive frame cottage designed by Architect F. E. Colby.

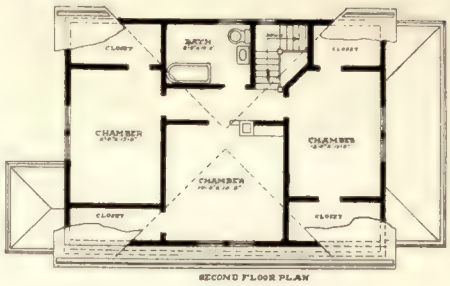
Not a dollar has gone to waste in the building of this home, and the plan is a very practical one. The porch extends across the entire front, supported by wooden columns and terrace. This porch has been sided up to the rail and the underfill is latticed. The piers from ground to rail are brick and the foundation is brick. The gables run from front to rear and side to side, securing three very good-sized bedrooms and bath on second floor. There is also a bedroom on the first floor; in fact, there is a good deal of room in this house.

The inside finish is very plain, being pine, stained, with yellow pine flooring,



Designed to eliminate all possible waste.





hot air heating plant, located in full basement, which also has laundry trays. This would be a very excellent design to follow where as much room as it provides is required and where one's means are limited.

The One-and-a-Half Story Type

SOMEWHAT in contrast to the inexpensive one-and-a-half-story cottage preceding this illustration, we have a cottage designed for a cement exterior up to the high belt course running around the top of the first story window sills with wide shingles used above.

This cottage embodies the very latest ideas in designs where the modern sun parlor and sleeping porch are features. It should be built well above grade to give the proper setting. There is a winding brick path leading up to an attractive entrance protected by a simple stoop roof. This is supported by brackets and this roof further extends over the dining room bay window as a protection to same.

The first story walls are constructed with metal lath and cement plaster, which walls flare, forming a buttress of all of the corners. The shingles above are laid on alternate courses, laid 10 inches

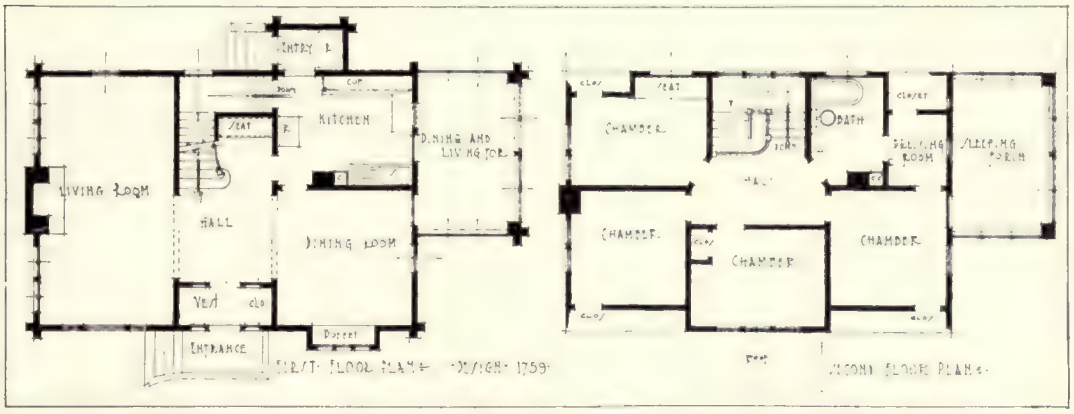


The lot should be well above grade to give this design the proper setting.

and 2 inches to the weather. A very pleasing scheme of decorating the exterior would be to tint the cement walls a cream color and stain the shingles brown, using a light maroon on the roof, and painting the exterior trim white. Where the cement work of a house runs down to the ground, as in this case, the addition of shrubbery and vines is very desirable. The cement, of course, offers a splendid opportunity for climbing roses, woodbine or other vines.

We have gone rather extensively into a discussion of the exterior of this design, and space does not permit of taking up in detail the interior, excepting to say that it will be found most interesting and to contain many little attractive features. A central hall has a wide attractive stair with a built-in seat and French doors leading onto the living porch. It would be quite possible to reverse the position of this porch, placing it on the opposite side of the living room if that would better meet the surroundings of the building site. There is no pantry provided, though the rear entry has the necessary space to accommodate refrigerator, and there are ample cupboards built in the kitchen.

Interior finish is suggested in oak with oak flooring and with maple or birch flooring in the bedrooms. The owner of this design wanted outside light in the closets, and it will be noted that small windows provide for that light in two of the large closets. Basement extends under house, equipped with hot water heating plant, laundry trays and the usual fuel bins, specifications of which call for a sealing of the bins to keep out the coal dust. This is one of the most attractive cottage designs that we are privileged to illustrate this month, and it will certainly appeal to many of our readers.



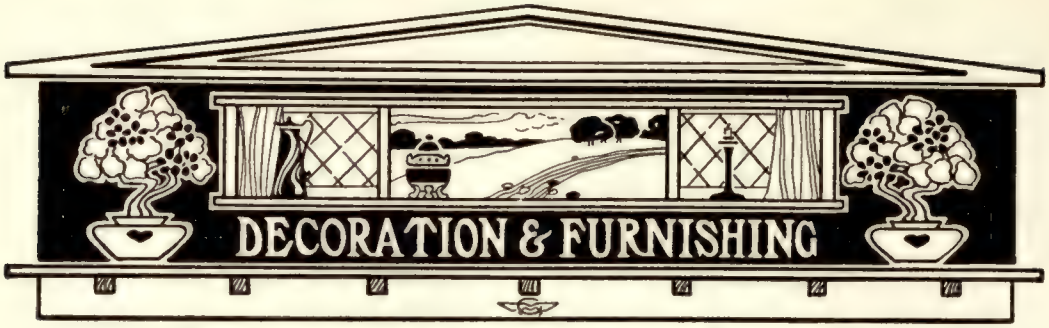
Example of the Newer Domestic Architecture

(*Continued from page 86*)

dence is the fact that every closet in the house, with one exception, has exterior windows. The one exception has a transom opening into another closet, which in turn has an outside window. The large number of wardrobes, linen closets, etc., may be noted, in addition to the generous closet space.

A special feature, which will appeal to the average man, is the fact that Mr. Cardwell's room has a bath with shower, and a closet for his personal use, in addition to the other bath and dressing rooms connected with his suite.

The house is equipped with burglar alarm, inter-communicating telephones, and Bell telephones; also speaking tubes and water filter, vacuum cleaning plant and hot water heater and all other modern appliances.



Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Art of Miss Elsie De Wolfe.

OF all the women decorators, and their name is legion, Miss De Wolfe is the one who has most distinctly arrived. She has lately published a book in which she sets forth her theories and her achievements. It is extremely interesting reading and the impression uppermost in one's mind at the finish is one of extreme simplicity. The difference between the Colony Club and the least pretentious of her country cottages is merely one of the quality of the materials used. Miss De Wolfe's preference is for the classic styles of the eighteenth century, Louis Seize and its English equivalents in terms of Chippendale and the Adam Brothers. She likes to panel her walls and beautify them with delicate mouldings, to cover her floors with Persian rugs and range Chinese lacquered cabinets along the sides of her rooms, but she is just as happy in working with cheap cottons and painted furniture, as long as color and line are good.

So many decorators show a preference for browns and grays that it is interesting to note Miss De Wolfe's liking for positive color. Her favorite color is a soft rose red, and she likes to combine this with an old blue. One very interesting room was a combination of violet and soft green. These combinations of positive color are tied together by using cretonnes of bold designs, repeating both, and are generally relieved against a background of cream or ivory wall. Sometimes a narrow line of one of the colors, following the mouldings of the woodwork helps still further.

On the vexed question of curtains her practice is uniform. Next the pane she uses the thinnest and finest of plain muslin curtains, and inside others of heavy fabric, cretonne, tapestry, silk or brocade, hanging in straight folds to the floor, and her preference is for cretonne of bold design and strong color. Lace she finds out of place at windows but she lavishes it on bed and table linen.

All of her rooms have the possibility of abundant light at night. She affects side brackets for permanent fixtures and a great many lamps, scattered about on small tables. Her sofas have tables and lamps at their heads, as do her beds. And apropos of beds she stands the familiar four poster with its side to a long wall, rather than with its foot in the center of the room.

One feature of many of her rooms is the day bed, the couch of generous proportions which can be made into a bed at need. In her own house her study becomes a guest chamber, with the aid of the day bed and of a tall mahogany secretary, whose shelves house, instead of books, a collection of curios, the drawers below available for the clothes of the guest.

No mention of this book would be complete without referring to Miss De Wolfe's use of mirrors, which she regards as a very valuable decorative asset, as well as a means of increasing the apparent size of rooms. She describes the decoration of one house with a very small hall, which was transformed by the building of a false door at one side, filled in with small panes of looking glass, so that one had the illusion of looking through a French door into another room. With the use of small mirrors to light up dark corners or to reflect some ornament at a different angle everyone is familiar.

Aside from its simplicity this account of Miss De Wolfe's work as a decorator suggests the fact that she is not tied down too rigidly to conventions. She admits to occasionally covering the entire floor with a nailed down carpet (of her favorite rose



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red), and she hangs pictures against a figured wall, and strongly figured at that, but such derelictions are so informed by good taste that they may easily be forgiven. It might be supposed that a book by the favorite decorator of fashionable New York would be of little use to the average woman, but in reality it is crammed with valuable suggestions for the short purse.

In Neutral Tone.

Strongly contrasted to Miss De Wolfe's work is a house in Cambridge, lately executed under the supervision of a well known Boston woman. The exterior of the house is charming, of white concrete with green roof and shutters, its long facade giving it much dignity and distinction. The interior finish is partly white enamel, partly gum wood in warm brown. The long living room, with brown wood finish has a wall covering of brownish gray Japanese grass cloth, against which hang various photographs in brown tones and frames. The curtains are cretonne with a conventional design of fruit in pink and green tones on a grayish brown ground, the rug an Arts and Crafts one in brown tones. In the dining room the walls are papered with a design of trees in olive tones with touches of mulberry, the woodwork is white, the furniture cherry, rather red in tone, the rug an olive Arts and Crafts with touches of bright color.

The hall, finished in gum wood, has a foliage paper in delicate gray tones, which is carried to the top of the house. The three front rooms on the second floor, a bedroom and the day and night nurseries are all papered in putty color, a paper with a narrow stripe and the electric fixtures are gray, the woodwork white, the only color supplied by the cretonne furnishings. In the two guest chambers, one with mahogany furniture has a tan colored paper with a cut out border of blurred roses and matching cretonnes, the other has white furniture, a small patterned yellow and white paper and Liberty cretonne in a Persian pattern of blues and yellow and cream.

Charming in warm sunshine, it would seem that this delicate and low toned scheme would be less pleasing in the gray days of winter. It takes a certain courage to adventure with the bright colors and striking accessories which are needed to relieve such somber coloring.

Suiting the Picture to the Style.

A picture dealer advertises "Pictures for the Colonial House." Some of the old fashioned interiors, the figures in the quaint costume of the bygone days of our history are charming, and they are to be recommended for the upper rooms of the house, though hardly of sufficient merit for the library or the drawing room.

One never, however, makes any mistake in getting the copies, whether in color or black and white of the pictures of Dendy Saddler, those delightful transcripts of English life in the first third of the last century. Nothing lights up a rather dark dining room so well as one of them in color, say "The Hunt Breakfast" or "The Toast." Some of the more sentimental subjects are charming for a drawing room, and there are still others, so prolific is the fancy of Mr. Saddler, which meet the needs of the library or the hall.

A type of picture which is rather new copies in color some old miniature, but not only the miniature but also its frame and the wall against which it hangs, the wall paper indicated being carefully chosen to bring out the points of the miniature. The whole is framed in a narrow but exquisitely made frame of gold or gold bronze.

The Goupil photogravures, in color, from old pastel portraits are charming drawing room pictures. They should be framed without a margin in gold, and it is admissible to hang them by a silk cord or a knotted ribbon from the picture moulding.

One cannot emphasize too strongly the importance of having pictures of some individuality, not exactly like those of everyone else. Reproduction by a different process may make an ordinary subject distinguished. Queen Louise and her staircase in the uncompromising truthfulness of a photograph is quite another person when her graceful lines are suggestively sketched by the etcher's needle. A photograph from a painting is often commonplace enough, not so a photograph from a print of the same painting, showing the engraver's transcription of the painter's conception. Bartolozzi made many prints from the portraits of Sir Joshua Reynolds and other artists of that peiod and one may sometimes find photogaphed copies of them, uniting the charm of two arts.



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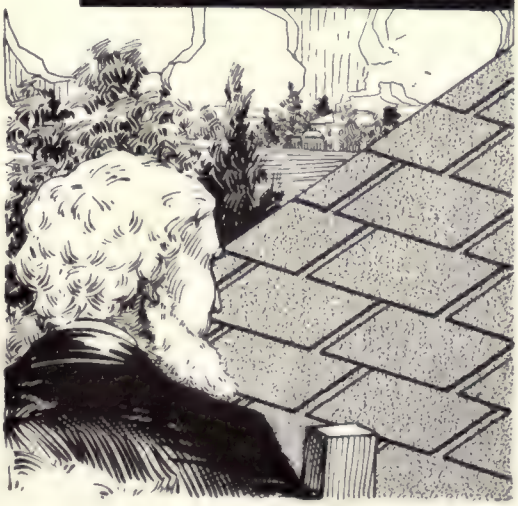
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Making the Best of Old Pictures.

And in this connection one is often confronted with pictures of no great merit, of an archaic type, mostly steel engravings, "The Signing of the Emancipation Proclamation" being an example. Sentiment keeps them in their place rather than any other consideration. Reframing solves the problem in this case, and the best thing for the purpose is a broad band of plain wood, black or mahogany, set close to the print. So treated, the objectionable picture will take an unassuming place in the corner of a room of brown or green tones.

The same plan can be pursued with oil paintings of dubious worth, to which the customary gold frame is hardly charitable. Here, too, the flat wooden frame is in order, either brown or weathered green, as best suits the tone of the picture. Sometimes a frame of unpolished ash, the grain well pulled up, is advisable. Stain it and give it a wash of gold paint, not too bright, rubbing it in with a woolen cloth. Mix the gold very thin. Another thing to do with an oil painting is to use it for a panel in the center of a wooden chimney piece, with only the simplest of narrow mouldings to define it.

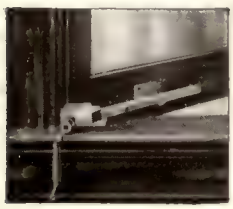
When the removal of the gold frame is out of the question it may be much improved by giving it a coat of gold paint toned down with bronze powder of green and brown bronze together being usually successful. It would be well if we could get rid of the feeling that an oil painting is a desirable asset, and when we buy pictures get water colors, which are apt to be much better from an artistic point of view, as well as in harmony with our modest houses.

The Fancy for Black and White.

The German Secession movement has brought about the use of strongly contrasted black and white in carpets, wall papers and textiles for hangings and upholstery. Merely reading about it, not seeing the schemes actually worked out, the idea seems almost grotesque, and it must be admitted that many of its developments are decidedly queer, and it would be to the last degree inadvisable for an entire house. It may be accepted as a revulsion from the craze for brilliant coloring and for intricate lines which characterized its predecessor, the Art Nouveau movement, and as such has a certain merit in judicious hands.

It is at its best in a room with white walls and the black should be used with discrimination, confined to hangings and other furnishings, and in moderation. The best designs in cretonnes are those in which the black and white are about evenly divided and the black is well distributed rather than in strong masses. One associates wicker furniture of simple outlines, heavily constructed and with the sides and backs of chairs and couches of the same height, with this special style and it should be painted white. It may be varied by the introduction of wooden furniture in bright black. Metal work in the room should be of wrought iron and the small objects for which ordinarily brass or copper would be chosen, candlesticks, desk furnishings and the like, should be silver, preferably in the gray finish. The pictures should be in black and white, with white mats, narrowly framed in black.

The needed touch of vivid color is supplied by the rug, and it should be supplemented by a single cushion and if possible flowers, in the same color. This color may be green of an emerald tone, orange, yellow, or old rose or red. This rug should be of velvet carpet, as the deep pile of that goes far to tone down what might be a too vivid contrast. It goes without saying that the scheme requires great care in the working out, but it has merit and interest in judicious hands, and is worth considering. It should be added that whatever is used should be of absolute simplicity and that anything like crowding is fatal to the proper effect.



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LIQUID GRANITE

ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

General Color Scheme.

W. H. N.—Please tell me what color scheme to use for the living room, dining room and den, trim being dark oak and floor oak; fireplace red tapestry brick—how to curtain the windows and side lights—what to have in front of fireplace to harmonize with the rough red brick. Would it be all right to use this same red brick instead of tile?

What kind of shades should I have, the house being shingle-stained a brown, and the sash being painted white.

What color scheme of rugs would you advise?

Ans.—We note from the plan you submit that the living room runs across the front of the house, having north and south windows, while the dining room is connected with this with such a wide opening that it is practically part of the living room and should be given the same general color treatment. As this room has a southern exposure, you will get a great deal of light and must be careful to use shades that will not affect the light too strongly. With a dark oak floor and trim and the big fireplace of red tapestry brick a soft creamy tan would make a good background for your furnishing but one word of caution, do not get too deep a shade of this for your dining room, as yellow if it is at all deep in tone is far too warm a color for a room having strong light. You might use a little paler tone of tan in the dining room with good effect. If the walls are done with one of the flat finishes, or a plain paper is used and this is the only treatment we have in mind, use a frieze or stencil design in gold and bronzy-green tones in the living room and let bronze with a deeper green predominate in the design in the dining room. For the living room secure some of the admirable designs of cretonne for the draperies and let the greens predominate in the design. For the dining room windows use a bronzy-green Sunfast for the draperies, with the white curtains back of it to form a background. If shades are used in addition to your overhangings they should be white or a dark green, as you do not want to over-accent the tans, simply use them as a background for your colors.

Could you procure a plaster or terra cotta frieze to use above your fireplace of tapestry brick? It would introduce just the right note into this general scheme. Carry out the same general color scheme in your rugs, being careful to use just a little deeper tone of the shades of tan and green which you have secured for draperies and wall decoration.

The den has a northern exposure; you could introduce quite a bit of reds in your treatment of this, a color which always suggests a great deal of warmth and is usually difficult to use, but ought to give a pleasing effect in a room having only northern windows. If red is used here, the wall might be given a soft green shade that would serve as a foil for the deep red in your furnishings. The table and chairs here should be mission finish and in the living room, since the atmosphere here is to be one of good cheer, we would suggest the green willow. The dining room furniture would also be of weathered oak.

Tan and Green Scheme.

A. P.—I am building a home and would like your suggestions on wood finishing, windows, fireplace, curtains, rugs, furniture, etc. Would like a tan and green color scheme. My piano and music cabinet are in mahogany and intend to get chairs to match for living room. How would you plan the opening between dining and living room as the other is a sliding door? Would you advise a davenport for den or living room? If for living room, please arrange



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windows on south wall for piano and davenport. Would you have long mirror on door leading into hall from den?

Ans.—We note you prefer a tan and green color scheme for down stairs and say that you already have piano and several other pieces in mahogany and intend to get the rest of the furniture to match this in your living room. We do not approve of using tan and green in these rooms. If you expect to keep your mahogany furniture, we think you will probably have to sacrifice one or the other. If you can exchange your mahogany pieces for some of the dark finishes of oak and have your woodwork finished in weathered oak or one of the beautiful green oak finishes, you could then carry out a very successful color scheme, using tan upon the walls with cream ceilings and introducing greens and browns into hangings and furnishings. If you prefer the mahogany furniture, we would suggest that you use a gray wall treatment which forms an admirable background for mahogany, such a living room would be charming with gray walls and a big fireplace in tile, with greens predominating there.

As for the opening between dining room and living room, it all depends whether you want to be able to close off these rooms entirely. If so, it will be necessary to use the sliding door treatment. There is a strong preference at present for treating these two rooms as one and simply connecting them by a wide cased opening. This really depends upon the personal preference of the owner and is a matter for him to decide, as the appearance of the two treatments are practically the same when the sliding door is not closed.

A davenport is always a very suitable piece of furniture for the den and if the fumed oak furniture is selected for the den, this would make a very desirable addition to your furnishings. A very good place for such a large piece of furniture is at one side of the fireplace and this is especially attractive if high windows are placed above, with built-in book shelves at either end.

As the open fireplace is in the room that you intend to use as a den, we would prefer having the davenport in this room. The piano should be placed against an inside wall as severe cold or dampness is apt to cause considerable trouble.

As to the mirror on the door leading into the den, while this is frequently found in very well furnished homes, it will be usually found a great deal more useful if placed in the door of one of your bedrooms, up stairs, say your guest room. Here it is quite invaluable and is utilitarian as well as decorative.

Paint for Bedroom.

W. C. C.—What color paint should be used for walls of bed room with mahogany furniture? What color with Circassian walnut? What color for bird'seye maple? Our house faces South with living room across entire front; dining room back of it, with four large windows in west. An opening of 10 feet between living room and dining room. Am planning to use grayish-green paper with rose hangings for windows in the living room. Have a green dome light fixture, must use in dining room. Will use oak panels in dining room. What shade of paper should I use above paneling? Have to buy new rugs for both rooms. Woodwork will be oak, golden wax finish. I think furniture mostly golden oak. All of dining room is golden oak.

Ans.—First as to colors for bedroom walls, almost any color is good with mahogany except the red tones. So you can have gray or ecru or old blue or pale green, depending on the exposure of the room. With Circassian walnut, if the room has a north or east exposure, we would use a grey wall, but not a bluish gray, with gay English flowered chintz curtains, etc., and run a banding round the top of the room which repeats the colors of the chintz. Bird'seye maple looks best with soft old blue.

In your dining room we would fill in the wall space between panels with the same color as you use on living room walls and above this paneling put a decorative foliage paper in dull greens and blues on grayish-green ground. There is a delightful paper of this description at $1.00 a roll.

The rug can be mixed blues and greens and the rug in living room plain green, not too bright, but not too dark. You can find such colorings in the Killmarnock Scotch rugs for the dining room and in Wilton or Saxony for the living room.

Attractive Books on Architecture and the Home

Title	*Author*	*Sale Price*	*Special Offer Price with year's subscription to Keith's Magazine*
The House in Good Taste	De Wolfe	$2.50	$3.75
Making Outdoor Rooms and Porches	Everlein	.50	2.00
Building The House	Keith	1.00	2.00
Hot Water Supply & Kitchen Connections	Hutton	1.50	2.50
Colonial Architecture	Wise	5.00	5.00
Making a Rose Garden	Saylor	.50	2.00
Chats on Cottage and Farm House Furniture	Hayden	2.00	3.25
The Swiss Chalet Book (Illustrated)	Dana	2.50	3.75
New Building Estimator	Arthur	3.00	4.25
Concrete Pottery and Garden Furniture	Davison	1.50	2.50
How to Lay Out Suburban Grounds	Kellaway	2.00	3.25
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Modern Plumbing	Starbuck	4.00	5.25
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An Ivory Enamel Treatment.

J. P. B.—We had thought of painting the wood work ivory, in living room and dining room with mahogany stained doors. I have a mahogany piano and two old mahogany tables. What kind of furniture would you use for dining and living room? What color would you use on walls of these two rooms? Please suggest something for curtains for windows, French doors and the two archways, etc.

Ans.—We like your plan of ivory wood trim with mahogany doors very much. Your rooms are very well arranged for such a treatment. We would also stain the china closet in dining room, mahogany and the living room mantel; also the stairs. This will strengthen the room and be easier to take care of. We would use an ivory tone rather than white, and enamel finish. As the living room has an east and north exposure, we would do the walls in a soft ecru color which is very lovely with mahogany and introduce a warm mulberry or deep old rose into the rug and hangings. Nothing could be prettier than plain ecru net or voile for the curtains with side draperies of mulberry raw silk or Sunfast and door hangings of mulberry velvet or velour.

Do not put too many pieces of furniture in the room. There seems a good chance for a couch or settee along the stair wall. The frame of this could be of birch stained mahogany and cushioned with mulberry tan colored rep, a little darker than wall. One of your small tables could be used in this room, the other for a serving table in the dining room. We would have a wicker fireside chair cushioned in a rose and tan jute material, and a smaller wicker arm chair the same.

You could get mahoganized birch for the dining room table and chairs and this would look the best with the woodwork. The dining room wall we would do in old blue with ecru ceiling same as living room. It would make a nice effect to run a molding or chair rail around the room with the same ecru color as living room wall continued up to this molding and the soft old blue above. Curtains of the ecru voile with little crocheted finishing edge.

Mission Furniture.

O. R. W.—Will you kindly give me advice as to the color scheme to use in the house we are building. Have found many helpful suggestions in your magazine, which we appreciate very much.

The exterior of the house is to be painted white, foundation red tapestry brick and white mortar. The living and dining rooms are to be finished in oak (dark brown); will have to have new rug for living room (domestic rug, and not too expensive), for furniture, have mission davenport, Morris chair, large rocker, etc.

Ans.—We note you have quite a bit of mission furniture for your living and dining rooms, and the color scheme selected must necessarily provide a suitable background for these. As the living room runs across the front of the house and has plenty of light, you might like the wall finished in an apple green with green ceiling, separated by a deep band of gold. With this treatment a tile fire-place would be very charming and would not be much more expensive than brick. It comes in the delightful shades and can also be secured with admirable pictural effects. However, if you prefer the brick, a dark red brick would fit in admirably with this color scheme. A two-toned green, deepening the tones of green used in the wall, would be very good. The deep bronze in the furnishings will tone down your general scheme. The rug you have for your dining room does present rather a difficult problem, but if you would used a soft putty gray on the walls here, with a frieze repeating the predominating tones of your rug, we think it may solve your difficulty. Of course this scheme brings out the rose and green tints in the rest of the furnishings so that these may be made to the color notes that will be accented in the general treatment of the room.

For the bedroom in which you expect to use the mahogany dresser and furnishings in which the yellow predominates, we think you would find an old blue wall treatment very successful. This will throw into relief the yellow and cretonne and makes an admirable background for mahogany. For the bedroom in which you expect to use the maple dresser, a very pretty color scheme here, would be a pale pink for the walls with deep green ceiling, the pink deepening to a rose tone in the draperies. Where the colored over-draperies are used the shades should be white.

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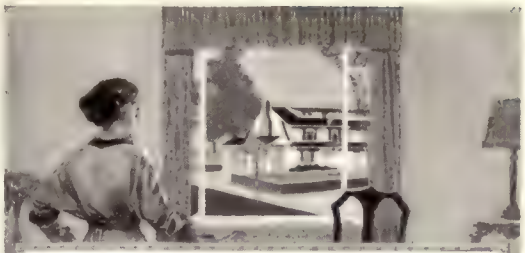
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A Few Building Devices to Consider

F. H. Sweet

ONE of the comparatively recent triumphs of building is the invention of a door hinge that will not allow the door to sag. The thing is so very simple that it is a wonder you did not think of it yourself long ago. Instead of attaching a hinge to the door frame and joining it to the door, a metal disk is clamped on the floor, and directly over it, in the upper corner of the frame, another one is placed. The door swings between these on a pivot, and there is no chance for it to sag or stick. This attachment has every advantage over the old hinge, and it may be applied both to swinging doors and to those of the ordinary type.

The heating of the country house often presents a very serious problem.

Every room should be supplied with an automatic appliance by which the heat is shut off from the pipes, and warning given of the change by a shrill whistle, immediately upon a previously determined degree of temperature being reached. When the room has cooled to another given degree, the heat is automatically returned to the pipes. Thus, without thought on your part, the variations that occur in the temperature of your room may be kept within the narrowest of limits. Anything that will preserve you from the evil effects resultant upon a morning spent in a room the temperature of which is marked by extremes of heat and cold, is without any manner of doubt worthy of the very highest commendation. All radiators should, for two reasons, be placed directly beneath the windows. First, and more important, no room can be properly heated when there is no warmth added to the cold air that to a greater or lesser degree sifts through the crevices of the windows. The other reason is one of pure utility. A consultation with the upholsterers will usually show you some plan for making your radiator an excellent base for a broad and comfortable window seat during the warm months. There is no better or more attractive use that can be made of a more or less unsightly object.

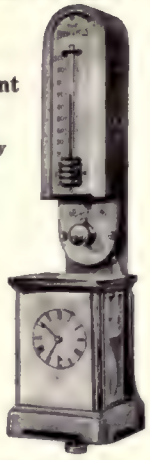
Nor does the utility of the steam apparatus cease with the performance of its heating function. The latest addition to the kitchen is a stove which may be connected with the steam pipes, and which may be used for all cooking purposes save baking. In a very large house the value of an auxiliary cooking power and an unlimited supply of hot water for the laundress is easy to appreciate, especially as the increase in running expenses amounts to a ridicuolously small sum.

Of late years there has been a regrettable discontinuance of the use of the open fire during the fall and spring months. The fireplaces are there, but the chimneys are usually closed permanently against the influx of cold air, for which the open chimney is justly notorious. This is eas-

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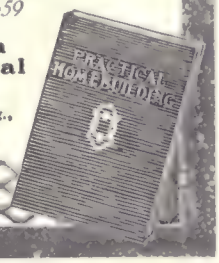
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ily remedied, however, by having the chimney fitted with a contrivance like a stovepipe damper of large proportions. By doing this, you have at once a means of ventilation and an efficacious method of shutting off draughts. Neither is there any difficulty about burning an open fire when this is used, for a slight opening of the damper is sufficient to permit the passage of smoke and to create a draught for the fire. The knob or handle by which it is turned may be of an ornate pattern, thus forming an attractive center in the panel above the fireplace.

If you are so fortunate as to live in a suburb, or near a township where electric power is obtainable, your list of comforts is materially increased; and of these electric lighting is not the least important. But even this almost ideal form of lighting has its drawbacks. It is impossible, for instance, to retain in a Colonial room the classic lines of lengthy perspective when a chandelier or hanging light intrudes upon the view. But by the exceedingly simple plan of having no hanging lights, and of placing the bulbs within an opalescent bowl, the rim of which is laid flush to the ceiling, this objection is overcome. The ceiling surrounding the bowl may be frescoed, or otherwise so decorated that an additional beauty is given to the room. Drawing room, library and dining room are rendered thrice attractive by having ceiling lights instead of the usual chandelier.

An exceedingly ingenious device has been invented, by means of which electric lights may be dimmed to any degree desired, thus doing away with another great objection to their use. Of course the difference is in the bulb. This is fitted with two distinct incandescent fibres, the smaller of which is made of a substance possessing less power of resistance than the usual filament. When the bulb is turned slightly, a portion of the current is shut off and the light disappears from the smaller fibre, leaving a brilliancy diminished by a third or two-thirds, according to the construction of the bulb. These two schemes have raised the electric light from the position of a doubtful advantage to that of an unquestioned comfort.

Owing to the excellence of pumping methods, we are not compelled, for the sake of living in the country, to forego the satisfaction of having plenty of water in the house. A gasoline engine or a pneumatic pump in the cellar will furnish enough water for two bathrooms and a goodly number of stationary wash basins. One of the latest things in bathroom appliances is a fixture which does away with the use of the flush tank. To the uninitiated, this appears to consist of nothing but a short crank attached to a piece of nickel pipe. In reality, it performs all the functions of the ball and valves of the flush tank; and not only is it neater and more attractive in appearance, but should any disorder arise, a few turns with a wrench will reveal its cause immediately. This fixture is a striking example of the tendency we possess toward compactness and the consideration of space economy in all things.

An outside fire escape is an ugly blot on a fair exterior, but there are times when the need of one is most sorely felt. But what is the use of having one when you can put at your hall window a portable, folding steel ladder? A child can throw one end of this device from the window, and, if necessary, climb down by it while it is still in the act of unfolding. There is no longer any excuse for the absence of any means of escaping from the upper stories of a burning house, when such an easy and cheap fixture as this can be installed.

The foregoing are but a few of the mass of small things the use of which lightens the burdens of many a householder.

There must, however, be reason in all things. Consult your architect or builder concerning the worth of any device that you may wish to use. Remember always, that although your house may be perfect in its larger details, it is in the ease with which the small cogs work that your true comfort lies.



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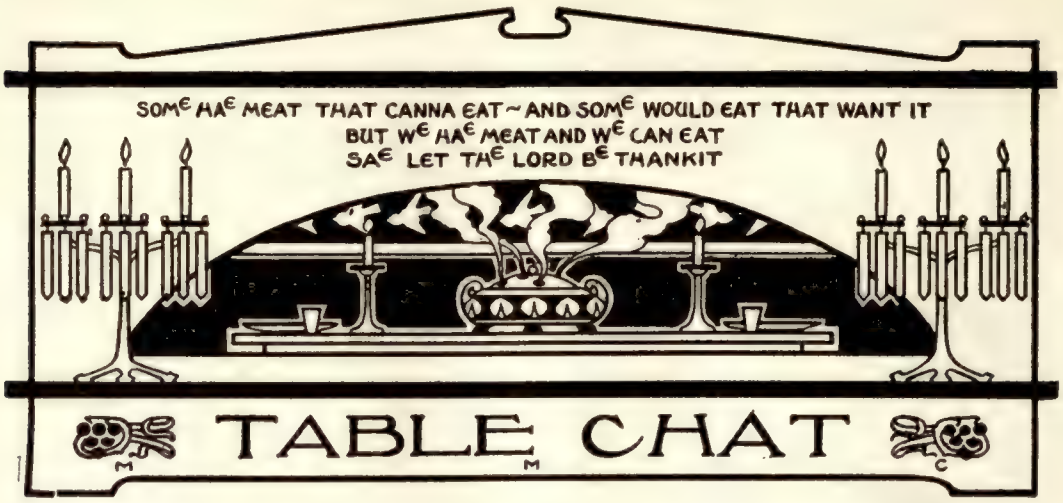


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Lighting the Dinner Table.

IN the rooms in which there is no overhead system of lighting, in which the electric fixtures are at the sides of the room, the problem of sufficient light for the dinner table is often difficult. Yet nothing is more uncomfortable than a poorly lighted table. Indeed, so closely are the senses of sight and taste connected that food imperfectly seen lacks the flavor of that whose color and form is distinctly apparent.

The most artistic sort of lighting is candle light. The young housekeeper can make no more profitable investment than the purchase of a pair of candelabra not too low and each holding four candles. One prefers silver plate, but an acceptable substitute is found in the clear glass which copies that of our colonial workers. Shades of more or less elaboration add greatly to the effect of candelabra, whether of glass or silver. The glass candelabra look best with plain white candles while with silver they may match the shades in color. The color of the shades depends somewhat upon the china used, but pink or amber are generally speaking the most satisfactory colors, although a yellowish green is sometimes very good. For the festal table with



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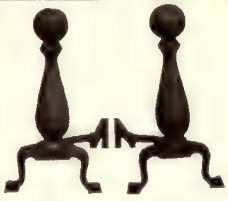
much other color the shades of embossed silver openwork over white silk are charming. One adornment too often seen on shades should be dispensed with, the fringe of beads, which gives a distressingly striped effect to the light.

It cannot be denied that candles are troublesome and also expensive, and they may very well be relegated to the sideboard, while for ordinary occasions their place is taken by a lamp. The hanging lamps which are at all possible are so few and hard to find that they must be dismissed from the category of possibilities, although once in a while one is seen which is wholly admirable. The practical lamp for the table may have to be sought in a second hand shop, inquiring for what used to be called a banquet lamp. These lamps had a solid base and a long stem supporting the bowl. With a shade of generous dimensions and a food burner, such a lamp is both efficient and ornamental.

The one objection to the use of a lamp is that it prevents the use of a central basket of flowers or ferns. This objection is not insuperable, as flowers can be arranged in small dishes around the base of the lamp, or else it can be flanked by four vases of flowers. On the other hand, if flowers are unattainable, as they so often are in cold weather, the center of the table is adequately provided for by the lamp.

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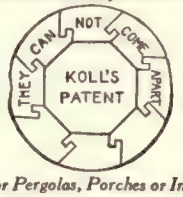
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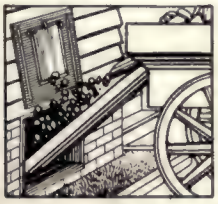
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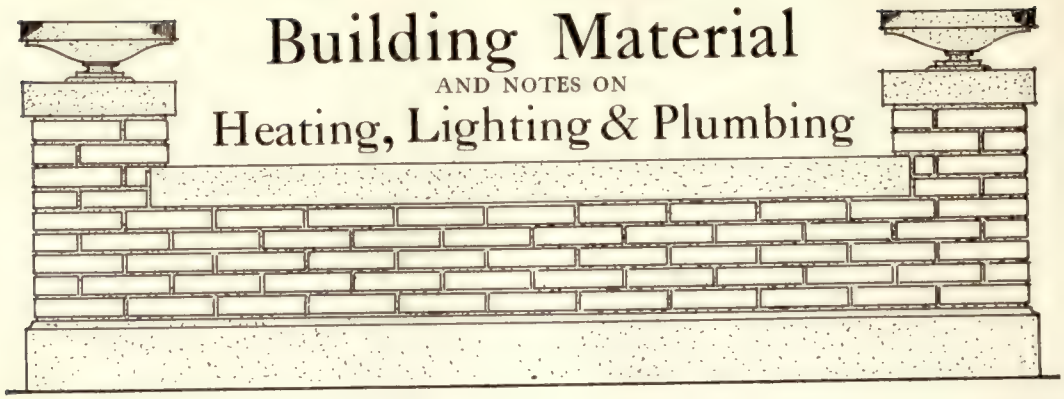
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Birch Coming Into Its Own.

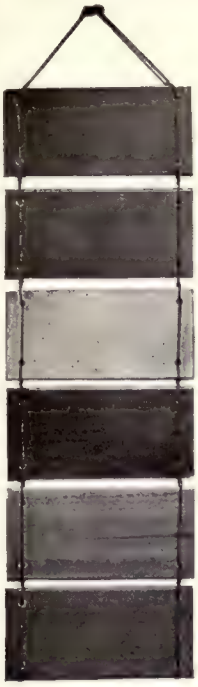
BIRCH should never have been substituted for mahogany or cherry. It should have stood on its own merit from the first. It is not a second-place wood, not an apology for or a substitute for anything. While it may be a compliment to birch that it has passed for mahogany for a hundred years, the time for compliments of that kind is now over, and the day is not distant when no one will wish to conceal real birch behind the false claim that it is a tropical wood. Without detracting one iota from the genuine worth of mahogany, it can be stated that birch possesses certain qualities which are superior to mahogany. It is stronger. It stands strains which would snap the tropical wood. It cannot be truthfully asserted that in beauty of grain when properly finished birch goes ahead of mahogany, because it does not—no wood does. But in combining strength and beauty, it ranks above mahogany. It takes finishes which no mahogany has ever yet received.

At the recent furniture show in Chicago the display of birch was instructive. When employed as an imitation of mahogany it was given the load to carry. If it was a bedstead, the rails were birch, because the strains fell there; if a chair, the arms and others parts were of the American wood, where strength as well as beauty were demanded; if a hatrack or coat tree of slender central spindle, more than likely the strain fell on a birch piece. That rule was general, though it was not universal.

It is not necessary to claim for birch that it is superior as a furniture and finish wood to all others in America. There are other extremely high-grade cabinet woods in this country, and all that need be claimed for birch is that it ranks with the best of them. It is strong, hard, stiff, takes fine polish, responds remarkably well to the application of stains and fillers, and if a figured wood is wanted, selected birch supplies it. All of the qualities of a superb cabinet material are here. It is no experiment. It has held its place and gained ground from the first, and it has reached a point where it is able to stand on its own merits and against all comers, either domestic or foreign. This claim extends to lower as well as to the best grades of highly colored and finely figured stock. Birch fills plebian as well as aristocratic places; it is the camp stool as well as the rocker; the bed slat as well as the carved legs of the grand piano. It is fit for nearly every part and class of woodwork. It detracts nothing from its long and honorable reputation to know that excavations have been shown that the terrible war chariots of the Assyrians, with scythe blades on the hubs and spears on the ends of the poles, were made of birch—rims, hubs, spokes, axles, poles and body. Then why hide the identity of this splendid wood under aliases and disguises?—*Hardwood Record,* Sept. 25, 1914.

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As to the claim that a material like good waterproofing, which is absolutely neutral, insoluble, inert and unchanged with age, could attack the metal reinforcement is too absurd to be discussed. There is no doubt that the many attacks on cement waterproofing by parties interested in promoting other materials have done much to deter inexperienced users from adopting waterproofing material of recognized value, but trained engineers pay little attention to loose statements unsupported by proof, and base their judgment on reliable records of long-time tests.

Novel Concrete Construction.

Built in the manner of a frame house but with all the parts of concrete instead of wood, a Los Angeles structure is unique in construction. All the material is poured in forms "at the job" so that none of the thin clapboards, two by fours or other parts will be injured in handling. The boards are reinforced with wire netting and are about as thick as the ordinary lumber used in building. While the concrete is soft, they are pierced at the proper points to admit the nails that attach them to the frame. The 2 x 4's are reinforced with steel rods, as are the stair frames and other concrete timbers. The method of attaching the boards to the frame is original: to the outside of each 2 x 4 is wired a strip of wood just heavy enough to receive the nails. The concrete foundation is poured in ordinary forms as for any frame structure.

The advantage of this form of concrete building is economy of material, as far less cement is required than to build solid concrete walls. The air space between the outer wall and the plaster within is another decided advantage, making for even temperature. Ease of setting up is claimed for this style of building, for apparently there is nothing to it that the average carpenter could not handle. Of course, the "forms" are designed to be used repeatedly and are bolted together and taken apart without difficulty.—*Building Age.*

Effect of Ventilating System on Room Acoustics.

In a report on the acoustics of auditoriums, based on an investigation of the acoustical properties of the auditorium at the University of Illinois, and published under the authorship of F. R. Watson as Bulletin No. 73 of the Engineering Experiment Station of the University of Illinois, the writer has the following to say on the effect of the ventilating system on the acoustics:

"It is found, that the effect of the usual ventilation currents on the acoustics in an auditorium is small. The temperature difference between the heated current and the air in the room is not great enough to affect the sound appreciably, and the motion of the current is too slow and over too short a distance to change the action of the sound to any marked extent.

"Under special circumstances, the heating and ventilating systems may prove disadvantageous. A hot stove or a current of hot air in the center of the room will seriously disturb the action of sound. Any irregularity in the air current so that sheets of cold and heated air fluctuate about the room will also modify the regular action of the sound and produce confusion. The object to be striven for is to keep the air in the room as homogeneous and steady as possible. Hot stoves, radiators, and currents of heated air should be kept near the walls and out of the center of the room. It is of some small advantage to have the ventilation current go in the same direction that the sound is to go, since a wind, as we all know, tends to carry the sound with it."—*Heating and Vent. Mag.*

Odors and Their Composition.

Following is the full text of Prof. John R. Allen's remarks at the recent meeting of the Heating Engineers' Society on the subject of odors:

"I am informed that there is no instrument known by which you can absolutely measure odors. The ordinary way to measure them is by an 'olfactometer,' which is the human nose, and that is more or less inaccurate. It has been stated that ozone acts by oxidizing the odors. Now we do not know what causes odors. We talk about the fine distribution of matter. When you come to radio-active materials and think of the infinitely small amount radiated from



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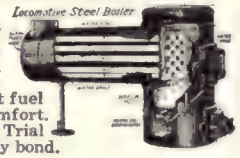
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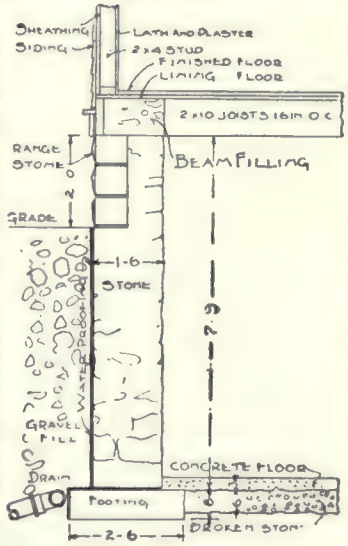
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them as compared to the energy that is given off; when you come to study smells such as the odor that is given off by a piece of sandalwood that has been giving off an odor for 2,000 years; when you come to consider how small must be the particles that have been given off from that sandalwood during all that period and that it is still giving off particles sufficiently powerful, however small they are, to affect the olfactory membrane, you will see that you are dealing with a very difficult subject.

"I do not think it is possible at the present time to tell whether we oxidize odors or not, because we do not know the chemical composition of odors. We are dealing with too minute particles to be able to analyze them, and the question arises in my mind whether after all the ozone, as a matter of fact, does act by oxidization."—*Heating and Vent. Mag.*

Proper Installation of Service Pipes.

The following notes on the proper installation of service pipes are taken from the latest annual report of the Lincoln, Neb., Water Department, Mr. James Tyler, Water Commissioner: Just inside the basement wall of the dwelling, or building, into which the service pipe extends, a stop and waste cock should be conveniently located, and arranged so that the water may be drawn back and all the pipes within the dwelling, or building, emptied through the stop and waste by opening the faucets at the highest points therein and allowing the air to enter the pipes. All of the pipes connected with the service inside the dwelling, or building, should be laid with an inclination toward the point in the cellar where the stop and waste is located, without any sags or pockets, so that the pipes may thoroughly empty themselves from water when the waste is opened. But in cases where such sags or traps are unavoidable an additional stop and waste should be put in. The service pipes in the dwelling or building should be located in the parts thereof best protected from frost, and should in no case be carried any considerable distance along side walls, or in same trench with sewer.

—*Building & Engineering News.*

Rendering a Cellar Water Tight.

A remedy for this trouble is the application of a plaster coat of oil-mixed mortar in the proportions of one part cement, two parts sand and 5 per cent of oil, mixed with enough water to form a rather stiff mortar. From what I know of dry walls I am inclined to think the correspondent wrote "pointed" instead of "painted." If I am right he will have to dig into the joints an inch or so all around the inside of the wall with a light pick so that the plaster will key well into them. The wall should then be washed with a composition of one part hydrochloric acid and five parts of water. After the elapse of half an hour the acid should be washed off with clean water, then the surface should be gone over with a wire brush to remove the loose particles.

This treatment, however, cannot be followed if water is seeping through, as it must be done in dry weather. A wash of cement and water mixed to the consistency of cream applied before the oil-mixed mortar will aid the new mortar in sticking to the old work. The old wall must be thoroughly wet before the new mortar is applied.

The floor is treated in the same way. If it is now concreted the surface must be roughened with a stone hammer; if not concreted it must be done with oil-mixed concrete. The new mortar must be kept damp for the period of at least a week.

It will be well if the underlying soil is very wet to lay a 6-in. foundation of sand, cinders, broken stone or gravel, compacting these materials well by tamping. In addition, it will be advantageous to employ drain tiles in this porous foundation, leading them to a sewer if possible. On top of this should be placed a 4-in. layer of concrete in the proportions of one part Portland cement, two and one-half parts sand and five parts broken stone or gravel with 10 per cent of petroleum residuum oil. It may be noted that 10 per cent will equal five quarts to the bag of cement. This treatment will make the cellar warmer and healthier in every way. Oil-mixed mortar containing 10 per cent of oil is absolutely water tight under a pressure of 40 lb. per square inch. The oil should have a specific gravity of not less than 0.93 nor more than 0.94 at 25 degrees C. It should be soluble in carbon disulphide at air temperature to at least 99.9 per cent.—*Building Age.*

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We understand you are debating at present whether or not shellac shall be used under the wax. If you do use shellac, it is going to give you a glossy surface, and as soon as the wax wears off, the shellac will show heel-marks and scratches, therefore, we never recommend the use of shellac.

It is a fact that some painters recommend shellac for obvious reasons. In the first place a great many of them are not familiar with the up-to-date way of finishing waxed floors, and they are against this method for the simple reason that it does not give them a chance to make so much money on the job. When shellac is used it makes the material cost that much more, and then there is extra labor for applying it. We merely mention these things as we are sure you want both sides of the story, and we have endeavored to give same to you from an unbiased view.

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SPLINTERS AND SHAVINGS

Should the Architect's Decision Be Final?

AT a conference of architects and contractors last month in Philadelphia the contractors sought to enlarge the field of arbitration as a means of final decision in case of appeal from the dictum of the architect. On this ground the architects met the contractors half way and from all accounts, all who were in the conference showed an admirable inclination to be fair and reasonable, says the *Improvement Bulletin*. The architects did not think it fair that they should yield entirely to the plan of arbitration. That is, they could not agree with the contractors that no decision of the architect should be final.

That is the continual live question between architects and builders, in the west as well as in the east. But there seems to be less inclination at present in the west to appeal from the judgment and requests of the architect.

In France, according to a recent statement by an authority the architect is supreme. He is the financier as well as the maker of the plans; and he is wholly responsible to the owner for results. In the construction of a building the French plan is to have one head and hold him accountable, on his agreement with or his commission from the owner. The principle of government in this is very similar to the principle of the commission form of government, the form which has won over so many communities in the United States, and is now proposed for a nation, Mexico. A commission government reduces the council to a minimum number, but gives each of the few men full authority in a department. Then it holds him responsible for results. This system undoubtedly has its advantages. The idea of centralized authority always has had many supporters and among them always have been able men. The larger the building the more the need of one final authority. The owner sees his architect first and the contractor later, if at all. The owner outlines his ideas to the architect and the architect produces a plan to meet his desires insofar as practical. The owner and designer reach a final agreement. Then the contractor appears on the scene to realize the ideas of the owner and the ideas, or plans and specifications of the architect. Thus it seems clear that the architect, representing the owner, should have the final say.

But are all architects fully prepared to make every detail of their plans and specifications right and practical? In the words of Hamlet, "That is the question." If he is a youngster and the contractor is an old experienced builder, the relation is not the same as when the architect is thoroughly equipped and experienced. We have seen some complaints of old contractors on public improvements against the placing of young engineers just out of college over them. Building contractors may feel the same inclination at times, for there is, in the building world, as in all walks of life, nothing like experience.

Then there is another consideration: This is a free country. It is founded not only on the idea of equality before the law and in opportunity, but also on the fraternal feeling which is shown in the fine old saying, "One touch of nature, makes the whole world kin." There is a strong get-together feeling in these United States. It is growing. The report of the conference of the architects and contractors in Philadelphia, showing an "increase in the field of arbitration" is one of a great many instances. It is the proper spirit and it will establish and maintain a general practice of open-minded consultation between the designer and the builder. The young architect should have respect for the suggestions of an experienced contractor of standing. The rule works both ways. But in instances of unsuccessful consultation over points, the owner's lack of technical knowledge having eliminated him, the plans and specifications accepted by the owner, in authorizing his architect to go ahead, must be followed.

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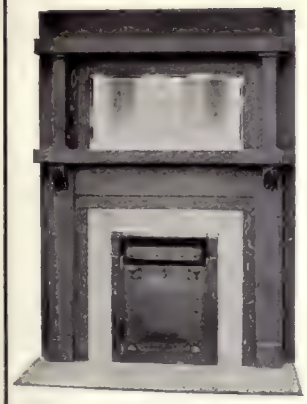
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Where's the Wooden Walk?

The wooden sidewalk has gone the way of the wooden Indian. A quarter century ago the plank promenades stretched for miles along which citizens could go stumbling in the dark amid the hazards of knot holes and loose boards—but now there isn't a single mile of 'em. Nowadays small boys cannot lose pennies between cracks or play mumbledy-peg on them.

In all its splinter-sprouting glory, the wooden sidewalk buoyed many a traveler on his way in the old days. The wooden sidewalk reached its greatest length in 1894. Since then fewer wooden walks were laid, gradually being replaced by cement and today the wooden plank walk is gone.

Where cement walks are being laid, a surprising number of things may be done to them. In Hamilton, Ontario, the names of the streets are marked in such walks at the corners, and these are much more sightly than the ordinary signs on poles or on the corners of houses. In some places, the owner's name and number is cut in the cement block at the curbstone, and one nature-student, who was having a cement walk made, amused himself by putting one of the native leaves in the corner of each block while it was still soft,—an oak leaf in one, a maple leaf in the next, a chestnut leaf in the third, and so on. These made perfect impressions in the plastic stuff, and this is the only really interesting sidewalk on record.

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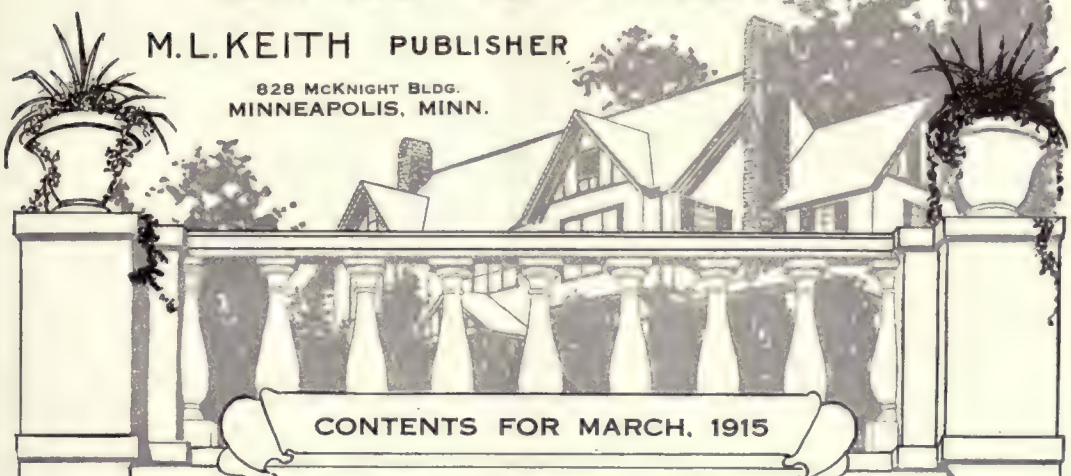


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An elaborate type of mantel which needs no further ornamentation. (See page 163.)

KEITH'S MAGAZINE

VOL. XXXIII MARCH, 1915 No. 3

Making the Old House New---A Labor and Its Reward

Warfield Webb

THOSE who have given the topic any consideration readily concede that it is more difficult to transform an old home into an ideal and livable one than to build a new structure from plans prepared by a professional. However, one's resourcefulness is here given ample play, and is the strongest evidence of how it is possible to transform the old, ugly and entirely inartistic abode to the most ideal and at the same time architecturally effective dwelling possible.



The house as it looked in the olden days.

There are many old houses that will permit of this metamorphosis. To realize the highest ideals, however, in this change, there is demanded of the owner, architect and builder a full appreciation of the work to be undertaken, likewise an ideal realization that will make possible the radical rearrangement. To make the plans work out successfully, in such instances, there must be given first thought and study and care in the planning so as to bring about the ends so desired, and at the same time keep the architectural outlines intact. If we are to tear down and rebuild, there is the danger of too much cost without sufficient returns. If there is simply to be a rearrangement of the plans, making radical innovations, and still keeping the general outlines true, we have a labor that will prove the real test of our artistic temperament.

This old home at Evanston, Ill., had been erected thirty-five years prior to its present ownership. It was of a French type of architecture by Blondell, and while stately and well constructed, had many architectural features and other factors badly planned and lacking in harmony. In a word, it was the home of another age, and did not possess some important features which make the ideal home of today. To transform this old mansion into a modern house, so that these glaring evils might be removed, was a work that demanded lots of study.

It is of brick, well builded, and with outlines that easily permitted of such changes as would be demanded to make it the newer planned home. It was a substantial home, with a hundred foot front of yard space by two hundred fifteen feet deep. The lawn was in good condition and the high iron fence gave the whole an aspect of gentility.

made to withstand the most severe attack of the elements.

Upon entering the hall, one was immediately impressed with the gloom. The stairway leading to the second floor was dark and sombre, being an old-fashioned hand rail and jig-sawed balustrade that led, with a single turn, to the upper hallway, and this, to-



It is hard to recognize the old house in this modern, up-to-date facade.

The front porch with its filigree work and its design of another age, instead of being a part of the house, was rather in the nature of an appendage, detracting from the effect that had been presumably thought a feature for added comfort and beauty. The large windows on either side of the entrance were out of proportion, one being at least a foot broader than the other. The hall doors had been

gether with the double doors of solid oak and dark walls, made the hall very dark and gruesome.

On the first floor to the right was the reception room, with the larger of the two front windows and one other smaller window looking out over the lawn. The woodwork in this room and in the living room on the opposite side of the hall was very dark and the walls were equally

sombre. This latter room was large, with high ceiling, and in addition to the porch window had but one small window two feet wide so that the amount of sunshine which was possible in these rooms, even on bright days, was only limited.

Directly back of the reception room was the dining room. How forbidding in appearance was this apartment! The black beams with dark ceiling and walls gave the whole a sad and depressing aspect. Only a half section of a window, below which was a sideboard, gave such meagre light to the diners as to be of little value. A door led directly to the butler's pantry; from there to the kitchen, which was more cheerful, being amply lighted and opening off onto a small rear porch.

At the southwest end of the house, directly back of the living room, there had, seemingly as an afterthought, been erected a double porch, noted in one of the old views, and this had been used as an outdoor sitting room and upstairs for sleeping quarters. It was the one modern feature of the old home. How to transform this abode into an ideal home, such as has been made possible now, was indeed a work of more than passing fancy.



A rear view before the rejuvenation.



The back lawn has been much improved by the addition of shrubbery on all sides and the bird bath and circle bench of concrete.

A beginning was made by tearing away the front porch, which was replaced with a double one of Colonial type, with a sweep that added to the dignity of the exterior and gave the entire house a new plan. The old wooden floor and steps were discarded for the more pleasing type of red paving brick, which added to the effect in a wonderful measure. Messrs. Childs and Smith, architects, had been invited to make the old home new, and the labor was to be one fraught with obstacles which would melt away with care and good taste. What a revelation was the removal of the old impossible porch!

The two large windows facing the porch had to be made to harmonize in size. The dark, massive doors were lightened with long glass panels, permitting a flood of light to enter the hallway. The balustrade was removed and a new pattern, with intermingling design, was placed therein. The reception room was brightened with a simple grapy plaster paneling, and a new mantel of exquisite design. Over the latter has been placed a mirror framed on the wall, the frame being the same as was used for panelling, and the effect is truly inspiring. This idea does away with the necessity for a mirror frame. It might be noted here that this mantel, as well as that installed in the living room, likewise of a simple and delicate pattern, are reproductions of Adam mantels by Arthur Todhunter, of New York, these being the highest type of mantels found in this country. There has been placed in this room an Adam type of electric light fixture, which is as effective as it is rare. As a part of the



The notable features of this living room are the lighting arrangements and the Adam mantel.



Dark walnut panels nine feet high, a copy from an old castle in Staffordshire, England, have been added in the dining room.

decorative scheme here, the medallions on the lighting fixtures harmonize with others on the sides of the mantel, being of Wedgewood.

A wonderful transformation has made the living room the most truly ideal. The single window that had looked out over the lawn was torn out and a large square bay placed therein with ample light from three sides, having French windows reaching to the floor, which make it possible to have light at all seasons of the year. The front window has also been lowered to an equal depth. There is a distance of fifty feet from the adjoining house, and the space is wide enough to permit plenty of sunshine and light. Just opposite the bay window there has been built in a fireplace, having Colonial mantel with Bedford stone trimmings, and over it hangs a painting, lighted from the same circuit as the lamp which is seen on the Adam table, which serves to light up the room sufficiently for conversational purposes. In this room there are no ceiling lights, but additional light is afforded from three Roman lamps of ancient make which have been wired for electric light. Then there are two old Chinese vases that have been converted into lamps, the color scheme of which is a rare combination, so notable in their artistic pottery work.

The decorative scheme in this room, which was formerly a dismal hue, is now of mulberry of different shades, the tones being most restful and delicate. There have been added such furnishings as will add to the carefree aspect, and the striking and prominent feature here, as is not-

ed in all other parts of the house, is the marked simplicity. The walls and floors are of hardwood and decorations and arrangements embody that studied simplicity which is the best evidence of artistic environment. It soothes and charms and becomes at the same time the rare secret that makes the home the real place of rest and solace to the tired body and brain.

The dining room has been relieved of its sombreness. It has undergone a change that is short of a miracle. The sideboard has been torn out and the windows lowered to within a foot of the floor. Leaded glass has taken the place of the ordinary panes, and at least twice as much daylight permitted. The dark beamed ceiling has been brightened; the beams are lighter in color and the spaces between these painted with a golden hue, thus making the effect very artistic. Dark walnut panels, nine feet high, a copy from an old castle in Staffordshire, England, have been placed about the entire room.

The table, a copy of an old refectory table, and the hand-carved chairs, are of the Elizabethan period, the latter having been made in the workhouse at Milan, Italy. The sideboard is nine feet long, and is of artistic workmanship, harmonizing with the entire setting of the room. The chandelier is of carved wood, English design, very old and quite an oddity. When the owners purchased it, there were spikes in the brackets over which the candles were forced, it having been made at least several hundred years before either oil or gas had come into use. The chandelier has been gilded, the effect being most pleasing to the eye, and hung with a silk cord and tassel which blend with the ceiling in an attractive manner. The curtains are of orange tone and the effect is such as to inspire where formerly it repelled the dweller. Over the sideboard hangs an ancient painting, a work of art, purchased in Italy.

At the end of the hall on the first floor there has been placed a lavatory, also a coat closet, where formerly had been placed the icebox, and the air has been made sweet and pure by a system of ventilating.

Upstairs one sees the large and airy bedroom. Owing to the fact that there is a great deal of furniture in this apartment, the walls were paneled, then stippled and painted, and the rug is a plain blue. The dresser is an odd piece. It does not have the usual mirror attached; on the contrary, it has an Adam mirror in gilt frame, hung over the dresser with cords, thereby giving the same a simple yet well defined setting. One sees the electric lighting fixtures of the same simple design also. This room was enlarged several feet so as to make the effect more notable. Just off this room the old bath room has been transformed into the latest ideal of this kind, using Vitrolite or white glass to replace the old wood wainscoting, and the fixtures are of the latest design.

On the opposite side of the bedroom is the sewing room, which is furnished in a simple and yet pleasing manner. It opens directly into a small bath room that has been installed by the new owners, utilizing a former closet, and from this there is a door leading into the guest room, with the same simple furnishings as have been noted elsewhere. Over to the south side there is the nursery and its simple white enameled beds and closet for the children's toys adds to the charm that has been seen on every side. From the rear end of the hall we enter into the anteroom leading to the sleeping porch. This is a dream place. The windows, protected with awnings, open inward, thus obviating the common error of placing them so as to open outward. There is every reason why the brain-weary human could find sweet repose here.

(Continued on Page 169)

Bungalow Home in the Ramapoe Mountains

Home of Mr. G. C. Watts, Cragmere Park, N. J.

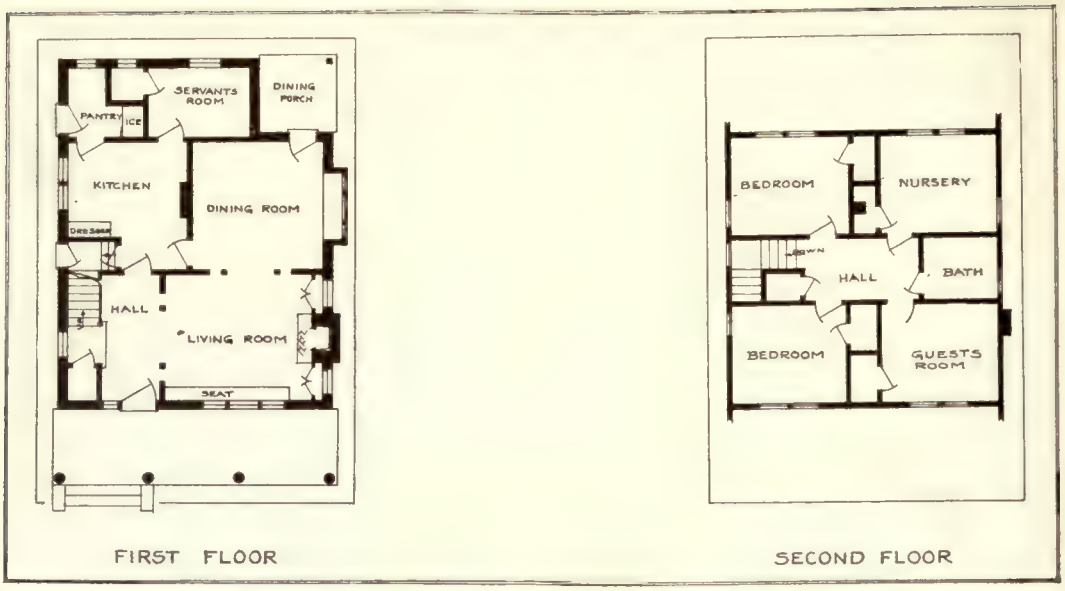
John S. Edmund

DESIGNED on simple lines that harmonize most beautifully with the surrounding country, with details and proportions that have been thoughtfully worked out, this bungalow may well be called a home ideal. Situated in that part of the Ramapoe Mountains of New Jersey known as Cragmere Park, overlooking the beautiful Ramapoe valley and river is this bungalow home of Mr. G. C. Watts with its walls of field stone and asbestos boards, and broad sheltering shingle roof, the straight sweep of which is broken by a large dormer that adds a structural charm to the building.

Field stone carefully selected and gathered from the immediate neighborhood has been used in the construction of the foundation, first story and chimney walls. There is perhaps no one of the external structural features of a house or bungalow which can so add or detract to the picturesqueness as the chimney. The chimney of this bungalow is very satisfying as a decorative structural feature on account of its well proportioned lines, ruggedness and solidity. The idea of strength and ruggedness is excellently caried out throughout the walls where the larger stones are more at the bottom than



Field stone has been used in the construction of the foundation, first story and chimney walls.



at the top and suggest more or less a loose pile of stones through the use of the raked joints. The use of field stone tends to keep the building in harmony with the environment and is also an item in keeping the cost down.

Asbestos boards one-quarter of an inch thick are used to cover the walls of the second story, the joints of which are covered with eight-inch wide cypress boards, being used after the manner of half timber construction. The dormers are also covered in the same manner. The panels are one of the most interesting features and form one of the decorations of the bungalow. Practically the only other decorations are the French doors and windows. The windows are of two styles, casement and double double-hung. The casement windows are used throughout the first floor and are made to swing outward, each sash is divided up into a number of small panes. Double-hung windows are used throughout the second floor, the upper sash being divided into a number of small panes. The panes of the casement windows of the first floor are larger in proportion than the ones of the double-hung windows in the second story.



View of reception hall showing staircase which is one of the features of this commodious interior.

Four massive round wood pillars support the porch roof. Flower boxes are placed between the pillars not only as a decorative feature but also to afford protection in

place of a rail. The porch is very spacious, extending across the full width of the bungalow, affording plenty of room for out-door living. The porch at the rear is used as an outdoor dining room. Both porch floors are of wood.

The entrance door is at the side of the porch and opens directly into the reception hall which is particularly well lighted. The view of the reception hall is taken from a point just inside the living room. On one side of the hall a wide opening leads to the living room with its open fireplace built of field stone and built-in bookcases on each side, and these bookcases with the built-in seat form the nucleus of the furnishings. On the other side of the hall are the stairs leading to the second floor. On the first landing of the stairs is a small hat and cloak closet, also a window which helps to light the reception hall. The stairway is lighted also at the second landing with a medium sized window.



One corner of the dining room showing window seat and treatment of woodwork.

A view is given here of the dining room showing the window seat and door leading to the dining porch and also gives a general impression of the various features of the decorative treatment of the woodwork. The dining room is separated from the living room only by the partial partitions and to all intents and purposes a part of the same room and shows the same woodwork and color scheme; there is however, enough variation in the structural features from those of the living room to give it an individuality of its own.

The kitchen is of good size and the facilities are conveniently arranged. The entry is also used as a pantry, the icebox being placed in a recess as shown. The laundry and heating apparatus are in the cellar.

It will be noticed that the servant's room is located on the first floor. This arrangement is especially desirable for the reason that it gives the maid her own quarters where she can come and go without disturbing the rest of the house.

Chestnut trim and oak floors are used throughout the first floor.

The second story has two bedrooms, one guest's room, nursery, bathroom. These are all light and airy and the windows with the upper sash made of small panes add greatly to the charm of the interior. A closet of good size is provided for each bedroom, etc., and a linen closet is located in the hall convenient to all rooms. The bathroom is finished off with white tile.

Fixing the Mantel

William B. Powell

More thought should be given towards ornamenting the mantel—it should be made as decorative as possible and not merely used as a depository for bric-a-brac.

SUPPOSE there is nothing which has had so much to do with the development of the home as the fireplace. The primeval man came nearest to knowing what home meant when he started his fire with pieces of flint. For the Indian, a fire was the centre of all life. To the Old Romans, one of the most sacred of all the dieties was Vesta, Goddess of the hearth. Yes, the fireplace has developed from a bunch of twigs in a virgin forest to its most modern form of a natural gas grate!

What a wealth of scenes the mere word fireplace brings up. Now I see a group of Feudal lords gathered round a roaring log fire, turning a sizzling Boars head and sipping hot wassail from a bowl. Again I can picture a Puritan mother reading the Bible to her family gathered around a cheery fire on a rugged hearth. Even in this day it is around the fireplace that we naturally gather, tho that fireplace may contain nothing more than immaculate artificial logs out of which come blue jets of gas at too regular intervals.



(Fig. 2.) A good arrangement of candlesticks and vases.

Granted that the fireplace is nearest to the heart of the home, how will you decorate the mantel above that important fireplace? Too often it is used as a depository for photographs, bric-a-brac, and for various matter for which there is no specially suited place. You will find that usually a fireplace is either over-

crowded, under-decorated, or else decorated with inappropriate articles. Of course there are many cases where the mantel has been artistically treated and I am showing illustrations of these. But I am addressing those of you who may not have given much thought to your mantel and fireplace, nor to the decorative possibilities afforded by "fixing" them in the most appropriate way.



(Fig. 3.) Crowded with too many things lacking in character.

There have been many articles and even books written on the subject of fireplaces — I mean about their architectural construction. It is not my intention to go into this subject at all— I merely want to have a little chat about how to fix the fireplace you now have. So let's look at a few of the most common type.

There are certain kinds of fireplaces which on account of their elaborate and decorative construction require, and in fact can stand, no decoration. Fig. 1 illustrates my point. (See Frontispiece)

But the average fireplace is built along



(Fig. 4.) An example of inexcusable negligence. Such a clock has no place in this room.

simple lines and really requires a carefully thought-out arrangement of its ornaments. In regard to the wall space above the mantel—I think that unless it is a part of the mantel and ornamental in itself, the best way to fill the space is to use a mirror. If you have a picture that is exceptionally good and of a proportionate size, the space above your mantel will display it more prominently the smaller towards the centre. Here again an exceptionally graceful mirror fills up the wall space so artistically that it seems as though it were just made for the space. The pair of vases help divide off the mantel symmetrically.

If you look at Fig. 3 you will see where candlesticks have again been used, but not to good advantage. I might better call them lamps but they are serving



(Fig. 5.) This style mantel needs very little ornamentation, but the arrangement here is very good.

than any other place. But the mirror has the advantage of adding size to your room. You can obtain charming mirrors copied after the old-fashioned designs. Those in sectional form seem to divide off your mantel-space better than the plain ones. Although if you want to make the mantel seem longer, the plain mirror is more desirable.

Right here let me urge the use of candlesticks on your mantel. You will find them very helpful and decorative. Fig. 2 shows four candlesticks cleverly placed. The larger pair are at either end, the same purpose as large candlesticks. Now these old-fashioned glass lamps are good,—especially so on a plain mantel such as this. But the trouble here is that they are too tall for the height of the ceiling. You will see that your eye is drawn to the centre of the mantel and that the whole presents an unpleasing, unbalanced appearance. Then, too, the other articles on the mantel do not seem to have enough character—I am afraid they were put there because "there was no other place." Now, mind you, this mantel isn't very badly arranged, but I

am suggesting how it can be improved. If a mirror had been placed above it, smaller candlesticks used, and if instead of two pieces between the clock and each candlestick, a single article, lower and larger had been used—I feel sure the fireplace would be very much better.

One of the many cases of inexcusable negligence in fireplace decoration is brought out in Fig. 4. Here we have a beautiful, substantial fireplace in a room that seems to be in very good taste. But the owner has evidently given no thought at all to the fireplace. To begin with, the ornate clock is not in keeping with the rest of the room. A broad clock built on sturdy lines would be far more appropriate. Of course the two photographs have no decorative value whatever. Here is a case where heavy candelabra with several branches are essential to conform to the proportion of room and mantle, or else some pottery with rich coloring and simple lines could have been used.

Fig. 5 is a good looking type of mantel, whose very construction requires little, if any, ornamentation. I think the three articles now on the mantel are very good, but the china vase on the left does not look as well with the brick as the brass vase on the right. Although it is a little away from my subject, one reason I have shown this illustration is on account of the arrangement of the furniture which makes the fireplace the center of interest. There is nothing original about the arrangement of this room, but it is very livable—the comfortable couch in front of the fireplace—the broad table back of it—a good reading lamp to throw the lamp over your shoulder—what more could you ask for solid comfort?



(Fig. 6.) One place where the arrangement of ornaments do not matter.

Speaking of solid comfort—just look at Fig. 6. Last, but not least, we come to a real, true, "homey" hearth. It would be sacrilege to find fault with this corner, dear to the heart of some camper. Too many sacred memories would be desecrated if we even suggested to tear down that pine-cone or to remove the wasp's nest, hanging before the mirror. No, when one is fortunate enough to live amid such peaceful, comfortable surroundings, anything is permissible. The warm "comfys" waiting patiently seem to have more value than the finest Chinese porcelain jardiniere on a Fifth Avenue hearth—if we may speak of hearths on Fifth Avenue!

A Big Problem Solved by a Little House

Una Nixon Hopkins

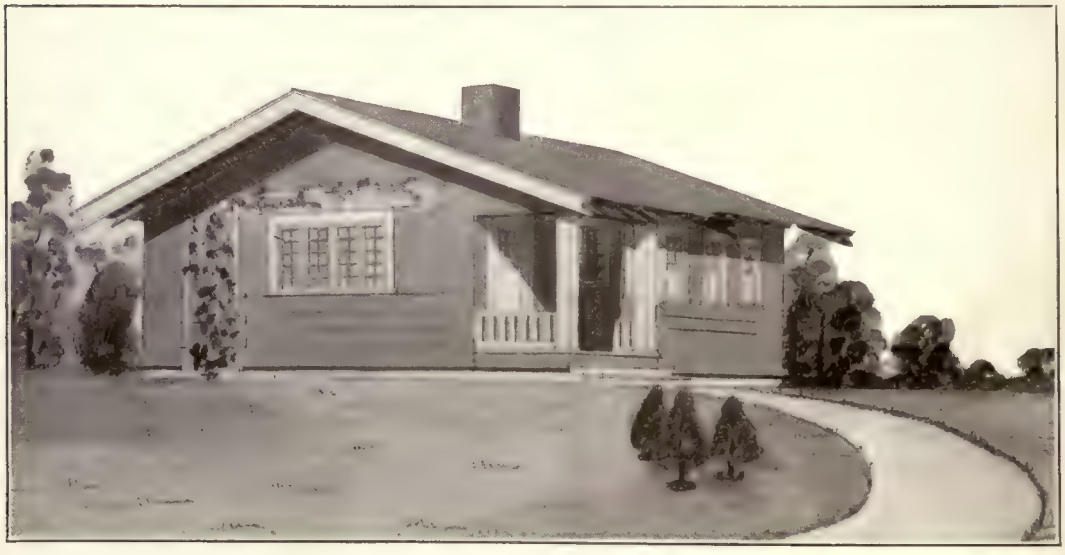
WHEN a certain young woman marries a certain young man, there is usually a long discussion relative to the location and specific kind of a roof beneath which they shall make their home. Pro represents a little house in the country perhaps, and Con stands for an apartment in town at the outset.

When the certain young man is on a salary he will likely feel that forty dollars a month is the limit price for an unfurnished apartment—which consists of about two rooms, a bath and a kitchenette—probably a blind kitchenette without a window. This means an investment for rent of four hundred and eighty dollars a year.

While discussing a house in the country he will find, if he makes careful investigation, that in almost any state there are good lots to be had, suitable for small houses, in pleasant sub-divisions, for five hundred dollars; in size, somewhere in the neighborhood of fifty feet front by one hundred in depth.

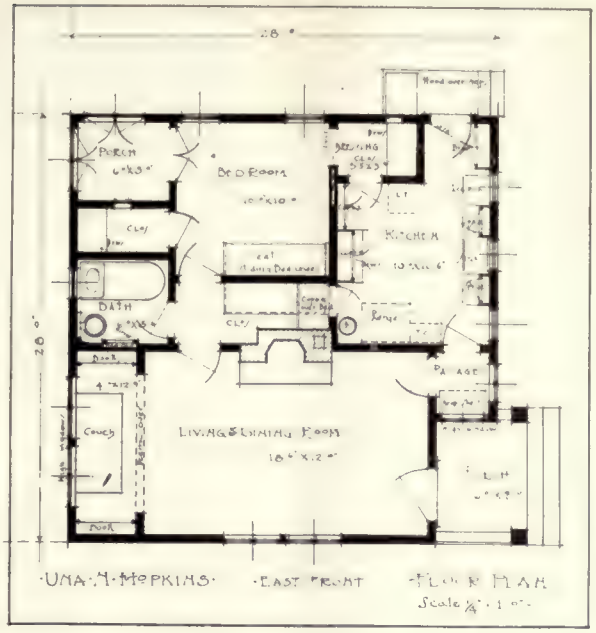
A small house like the illustration can be built for fourteen hundred and fifty dollars, making an investment altogether of nineteen hundred and fifty dollars, which would make the rent, figuring on the basis six per cent. on the investment, come to one hundred and fourteen dollars a year, thereby saving the difference between four hundred eighty and one hundred fourteen, or three hundred and sixty-six dollars a year.

The investment is an amount a sensible young man has usually saved before his wedding day. Not only is there the



A charming little home that is well within the means of many a young couple.

joy of having one's own house on the side of a little country or suburbs, but the saving in rent will in a few years bring up the bank balance to the original amount.



Such a house to have character must not be designed along cut and dried lines. A place in the little box of a sitting room behind where there is another little box of a dining room is not pretty. Neither is a small house livable even when the living room and dining room are combined in one good room if this room opens into a kitchen.

The details of arangement of the little house are usually overlooked, it being taken for granted by the average home maker that nothing interesting can be produced with little money and little space. Whereas, if the same degree of interest and ingenuity be brought to bear on a small home as on a large one, the result will be surprising.

The lot here faces east. You enter the house by way of a porch on the northeast corner. It admits you immediately into the main room. At one end is an alcove divided from the room proper by a heavy beam next the ceiling. Under a row of four casement windows is a wide box couch, especially made with extra fine springs. This constitutes the guest room, for there are curtains suspended from the beam at either end, which may be drawn at night. This was a clever scheme originated in order to be able to offer hospitality over night. For to have built in a folding bed would have taken space out of the room, where here it is all included in the room. Piled with pillows, this couch makes a pleasing piece of furniture.

There are low bookcases at either end of the alcove and over one is an old fashioned mirror before which one may make a toilet. The bath and a clothes closet are nearby and altogether a more comfortable guest corner is provided than would be possible in a tiny city apartment, where in truth, one could hardly be provided at all. There is a large fireplace in the center of the big room, with casement windows opposite on the east. Some one fortunately told the new home builders in the beginning no doubt that a small house must have small windows in order to be picturesque, cosey, and fortunately they heeded the advice.

The bath room is off a passage-way which lies between the living room and bedroom. To save space and the expense of plumbing fixtures, the wash bowl is at the head of the tub and over it, the two fixtures included in one.

On the other end of the passage is a closet, part of which is occupied in the daytime by the folding bed, the other half of the bed making a couch during the day in the bedroom. This style is among the best of the many designs in

folding beds and easily procurable. The closet is well ventilated over head. This is rather a pleasing arrangement for so small a house, for it converts the bedroom into a den in the daytime.

Next the bath is a second closet with drawers—one or two of which are designed for the bed linen, the table linen being kept in the kitchen.

On the south-west, opening off the bedroom by French doors is a cosey corner porch, enclosed with glass and furnished with two large comfortable chairs from where you may look out onto the garden. The effect here may be added to materially by reproducing the coloring of the cretonne at the bedroom windows in the flower beds just outside, giving the impression that the house extends into the garden.

Between the bedroom and the kitchen is a little dressing room, with built-in drawers and a tiny window, just even at the bottom with the top drawer which has a mirror above and is used as a dresser. The dressing room is not only a great convenience, but cuts off the bedroom from the kitchen. At the same time if a certain new housekeeper is in the kitchen and the door bell rings she can quickly reach her bedroom for any article of toilet she may quickly want to don before going to the door.

Between the living room and kitchen is a passage which separates the former from the noise and odor of the kitchen. It has two little casements on the east and two on the north, with room on the ledge for flower pots. Under the windows on the east is a drop shelf large enough to hold a good sized tray and there are two wicker stools under the north window. When the breakfast tray is prepared the shelf is raised and the tray is put on it. Then when the stools are drawn up, breakfast is ready.

Breakfast over, the tray is carried to the kitchen and the drop shelf is lowered out of the way.

The dining table in the big room should be round, since it would take up less space than a square or oblong one and it can be pressed into service as a library table when not used for dining.

The living room fireplace has a flue for the kitchen in case gas is not used. As a cellar was not thought necessary for so small a house the boiler is shown on the kitchen plan.

The kitchen is most complete. There is an ample dish cupboard with drawers beneath for linen, with a sink flanked by little cupboards above and large cupboards beneath. One laundry tub in the kitchen has a pine cover with hinges, and on this cover the moulding board may be put, the bins being nearby to the left of the sink. On this cover the ironing may be done also. In any case it is to be preferred to a tub beneath sink such as are arranged in apartments, which necessitates raising the sink tray whenever used, and besides a tub beneath is not easy to keep clean.

The icebox conveniently at hand may be filled from the outside as in any house. And next it is a cupboard for brooms. In the outside door is a window which opens independent of the door and gives ventilation.

The whole interior is finished in pine wood, that of the living room being stained a light golden brown with light buff paint in the bedroom, bath and kitchen, three coats of it; the walls being light buff throughout the house. Cement was put in the plaster here, not only to deaden sound in so small a house, but because of the smallness to protect the walls as they might easily be injured.

The light walls lend a feeling of space to the rooms and the plainness of them adds to the impression.

The floors are hardwood, excepting in the linoleum covered kitchen.

Though the heat in living room and kitchen is assured, a gas radiator is placed in every room. These radiators are of two kinds—one a floor radiator, very much like the ones provided for hot air, and the other stands on the floor the same as steam radiators. Both are good. In districts where gas is not available a furnace might be installed in even so small a house as this; furnace room and furnace coming within a hundred and twenty-five dollar limit.

On the back of the house just over the rear steps, perhaps five feet high, two wood straps have been nailed and a narrow strip of wood runs through them. When ice is wanted the sign is hung on the end of the wood strip when it is pushed outward, being brought back out of the way when the sign is not needed. It saves defacing the front of a pretty cottage by hanging no sign in front.

Outside the house is stained brown with light buff lattices on the front for roses to climb over, and the roof is brown, for to divide the outside color of small houses is to make them appear still smaller.

In spite of the fact that it is a little house it has the important thing, one large room with an open fire, where one is at liberty to have a pussy on the hearth if one wishes without fear of being ejected by a landlord as would be the case in an apartment.

There is a real kitchen with light and air. It is in reality a home, where a garden and trees are possible—all surrounded by the great outdoors which cannot fail to make for health and happiness and sane living.

Between this and the apartment there is no comparison.

Making the Old House New---A Labor and Its Reward

(Continued from page 158)

The servant's quarters are on the opposite side of the hall. A rear stair, with door glass-paneled, leads to the downstairs, thus making the living abode and the servants' section entirely separate from one another. In this connection there is to be noted an innovation that is unique. You will recall the small rear porch. This has been enclosed and the northern section has been utilized for a servants' eating alcove, fitted with a removable table and seats that much resemble pews. Ample window space and cozy effects add a charm that is inviting. On the south side of the porch there has been built an enclosure for the ice box and pantry. The kitchen is bright, airy and cheerful and sanitary in its highest possible degree.

Out into the yard one goes with a sense of having noted a marvelous change inside the home. There has been added to the lawn shrubbery on all sides that gives it an air of seclusion that is poetic. There is a large bird bath of concrete, a stone circle bench about a tree and the other effects that have transformed the lawn into a thing of beauty. An immense Dutchman's pipe vine, with the hedge, hiding the servants' section and garage, has the effect so much sought—that of privacy and comfort. A hedge of boxwood trees has added much to the effective view of the whole, while the two sixty-foot elms act as stately guardians of the abode. Another hedge in the side yard obstructs the view from the street, and altogether the setting is truly one that demands admiration and a home-like sweetness that is ideal.

How to Plant a Fifty-Foot Lot

Wyman P. Harper, Landscape Architect

THE planting plan accompanying this sketch is for a slightly larger lot than the one given in the February number. The house illustrated is a somewhat more pretentious one and requires for its best appearance a larger piece of land. It is, however, like the February plan, complete in its specifications, so that with similar conditions one can order his plants from a nursery by the planting list, dig his plant-beds, do his planting complete and thereby secure most pleasing and satisfactory results.

In choosing the kinds of nursery stock for a plan like this, the first requisite is that they shall be hardy. No matter how fine the appearance in another climate, if a plant here is not in its full health and luxuriance it is only a disappointment. Its branching and leafage is expected to be strong and full in order to perform the work expected of it. If they are thin and ungainly they are worse than if the place were not planted at all. The first tendency in choosing such a list is to select those things that are rare, but after a while one comes to depend only upon the old substantial kinds which stay year in and year out: only relenting if one has a particular fondness for a tender kind, and wishes to coddle it by putting it in some secluded and sheltered corner, where, should it disappear, it will have no ill effects on the general scheme.

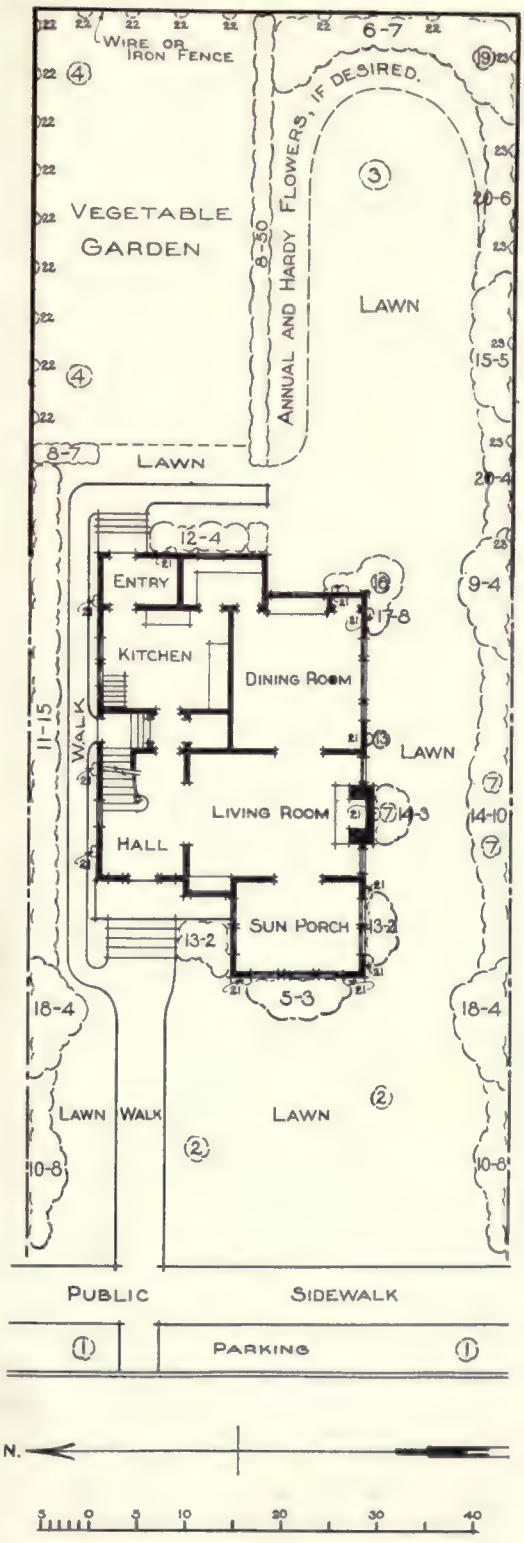
Next in importance after hardiness is height, after a plant shall have arrived at some degree of maturity. The intention of the accompanying plan is to have a strong background of high-growing shrubs and no plant fills that specification better than the Lilac, which one can never have too much of. Around the sun porch something is wanted that will

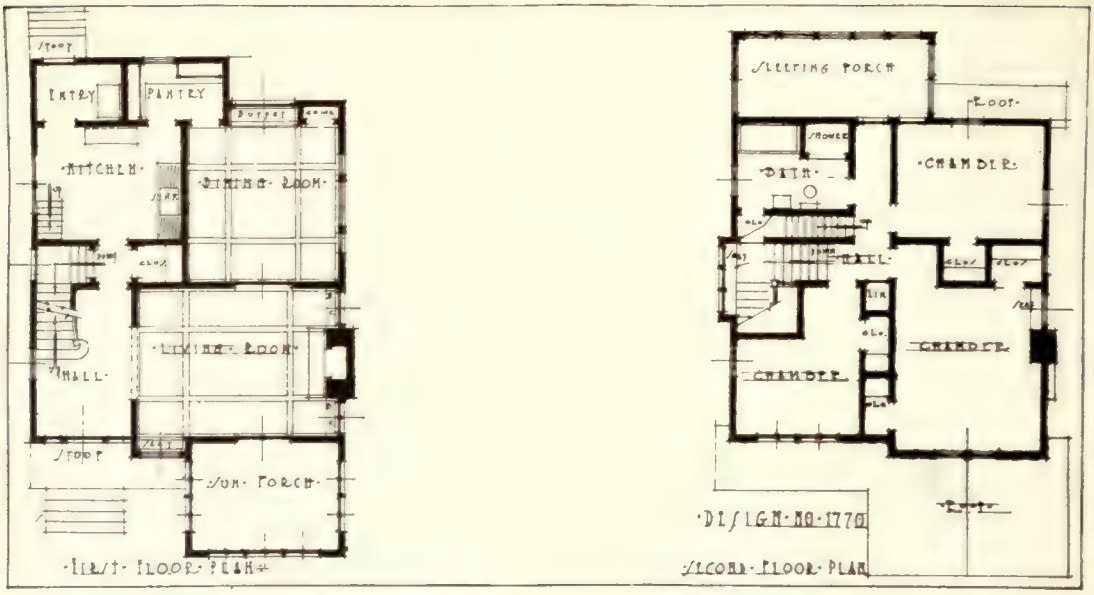


Residence planned for a fifty-foot lot.

Planting List.	No. Plants	Feet Apart
1. American Elm (Ulmus Americana)	2	
2. Mountain Ash (Sorbus aucuparia, or S. Americana, or S. quercifolia)	1	
3. Ash (Fraxinus Americana)	1	
4. Apple Tree	2	
5. Bridal Wreath (Spiraea Van Houttei)	3	4
6. Common Lilac (Syringa vulgaris)	7	4½
7. Mock Orange (Philadelphus coronarius) or (For St. Louis and South) Rose of Sharon (Hibiscus Syriacus)	3	
8. Hedge, Bridal Wreath (Spiraea Van Houttei) or (For St. Louis and South) California Privet (Ligustrum ovalifolium)	57	1
9. Persian Lilac (Syringa Persica or Chinensis)	4	4
10. Japanese Rose—cut back each spring (Rosa rugosa)	16	2½
11. Hydrangea p. g.—cut back each spring	15	3
12. Snowball Hydrangea (Hydrangea arborescens sterilis)	4	3
13. Weigela (Diervilla rosea)	5	4
14. Snowberry (Symphoricarpus racemosus) or (For St. Louis and South) Regel's Privet (Ligustrum Regelianum)	13	3
15. Highbush Cranberry (Viburnum Opulus)	5	4
16. Snowball (Viburnum Opulus sterilis) or (For St. Louis and South) Japanese Snowball (Viburnum plicatum)	1	
17. Indian Currant (Symphoricarpus vulgaris) or (For St. Louis and South) Dwarf Deutzia (Deutzia gracilis)	8	2
18. Tartarian Honeysuckle (Lonicera Tatarica) or (For St. Louis and South) Deutzia (Deutzia crenata fl. pl.)	8	4
19. Tree Lilac (Syringa Japonica)	1	
20. Ash-leaved Spirea (Spiraea sorbifolia) or (For St. Louis and South) Weeping Golden Bell (Forsythia suspensa)	10	3½
21. Engelmann's Woodbine (Ampelopsis Engelmanni) or (For St. Louis and South) Boston Ivy (Ampelopsis Veitchii)	12	
22. Bitter Sweet (Celastrus scandens) or (For St. Louis and South) Hall's Honeysuckle (Lonicera Halliana)	15	
23. Japanese Clematis (Clematis paniculata)	6	

Note.—The first number in a plant-bed indicates the kind of plant. The second number in a plant-bed indicates the quantity of that kind needed to fill the space. Circles represent individual plants, half-circles represent vines.





grow nearly up to the window sills, but not quite. The Bridal Wreath will do so, and since that position is the most conspicuous of the whole planting, the Bridal Wreath, because of the refinement of its delicate branches, leaves and flowers, fills the place perfectly for that reason also. If the house were farther from the street or in a more isolated position, it might have been desirable to have the border planting between the house and street of some considerable height. Under existing conditions, it is best if the border starts low, rising later to a high point before the house is reached. A suitable plant for the purpose is the Japanese Rose or Rosa rugosa, which is comparatively low-growing and should anyway be cut back early every spring in order to make its growth more stocky. The Japanese Barberry might have been used instead, as similarly filling the specifications of a low, bushy shrub looking well in a mass and of enough refinement so that one does not tire of seeing it always before the eyes.

Almost as important as height is color. A planting plan which makes much of high-colored leaves like the purples and yellows is to be avoided. Plants whose leaves have only a variety of green are most satisfying in the long run. The beauty of the forest comes so far as color is concerned in the delicacy of its shadings rather than in its riot of color. Yet in such a planting as the plan expresses some color is wanted, and the more of the right kind the better. Color

ESTIMATE OF COST.

Cost of Plants:		
3 large growing trees at $2..	$6.00	
4 small growing trees at $1..	4.00	
193 shrubs and vines at 25c...	48.25	
10 per cent additional for freight and packing charged extra	5.82	
		$64.07
Cost of Preparation of Soil:		
(Omitting cost of extra black earth and clay if needed.)		
1 man digging 1,800 sq. ft. plant beds 7 days at $2.	$14.00	
1 man planting trees and shrubbery 2½ days at $2	5.00	
		19.00
		$83.07

should come from flowers only. That is half the glory of the Lilac and Bridal Wreath, even though the other half is the form and texture of its foliage and habit. The flowering is transient, to be sure, but if the same flowers were to be seen every day for all summer they would become just as tiresome as colored foliage.

The house in the plan is placed as near the north line as will permit a narrow walk to pass around to the back door and leave a narrow margin for planting next the property line. It stands 30 feet from the street with some little lawn in front, and to the south, as well as on part of the rear lot, where there is room enough for a view of the lawn and planting out of the dining room window and still have space for a little vegetable garden next the kitchen. A hedge makes a barrier between the two rear spaces, and in front of it next the lawn, if one desires it, a flower bed can be dug, a little deeper and richer still than the planting beds described in the February number, which in all other respects will apply to the planting in this number also. The total depth of the lot is 130 feet. The size of a lot has less to do with its beauty than many other things, and as much comfort can often be found on an area of this size as on many having greater seeming advantages.

A Little Spanish Mission Design

KEITH & PURDY, Architects

THROUGHOUT the South and Southwestern portion of the United States are to be seen many homes exceedingly artistic in their design where the noticeable Spanish characteristics of architecture are introduced. As a general rule these homes are treated with stucco for the outside walls and this type of finish is more and more being adopted throughout the entire country.

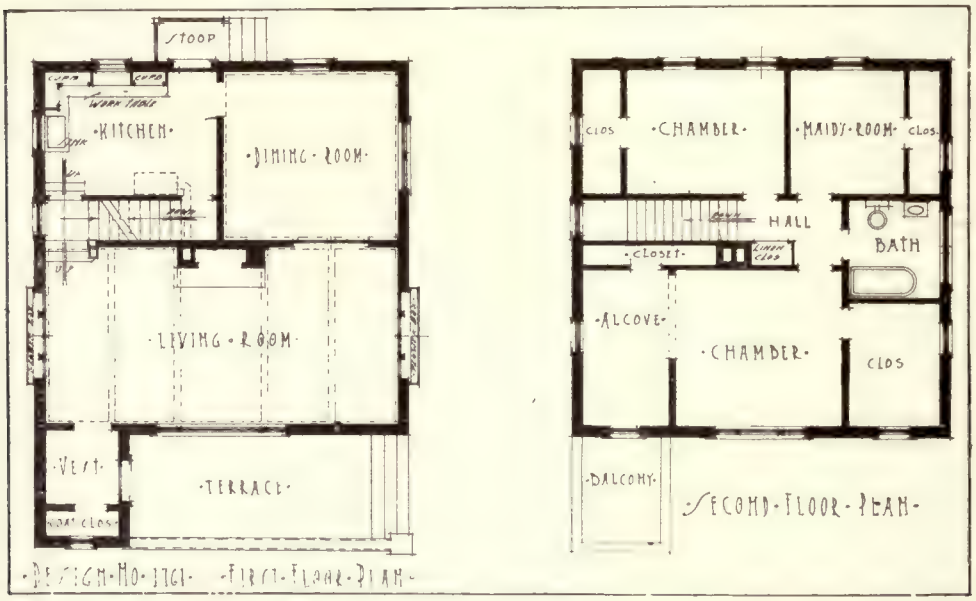


This type of design is becoming more popular.

We can say, therefore, that the Spanish or Mission house is not very commonly seen east of the Rocky Mountains.

There are frequent requests of us, however, to show designs of this type and the accompanying illustration is a pleasing example of the same. This house should appeal to a great many who desire a substantial, well built home of moderate cost.

The construction of the walls is hollow tile covered with a coating of cement plaster and it is intended to use red tile of



Spanish design on the roof. The coping of porch and window caps is of cement which has been troweled smooth. From the basement floor to grade the foundation wall is poured concrete; above grade, brick, and the steps leading to the cement port are also of brick.

Turning to a consideration of the interior arrangement, we find a very simple plan. Provision is made for vestibule with coat closet and the entrance is directly from the vestibule into the splendid living room extending across the entire front. Combination stairs lead from kitchen with but two risers to platform, so that one can go directly to front door without passing clear around through the dining room.

There are three chambers; one of which is somewhat smaller and intended to be used as a maid's room with a good size bath on the second floor. The plan is entirely free from breaks in the walls; that is, the wall lines are perfectly square, the cost of building being held down to as close a figure as it is possible to get a house of this size. We would say that under present favorable conditions, with lower prices prevailing than for some time, this house should be completed inside of $4,000.

Take another look at the living room which, as you enter, gives you the impression of getting inside of a mansion, it is so generous and roomy. The fireplace is treated on low broad lines. There are French doors leading into the dining room. The windows have been artistically treated with many little diamond lights adding a touch of beauty.

An Attractive Bungalow

JUD YOHO, Architect

THE outlook has much to do with the happy appearanec of this bungalow, and the bungalow's design, per contra, was much actuated by the locality. It is not too much to say that when another summer's growth of plant and flower adorns this bungalow it will be one of the prettiest in the west.

First let us study the plan. The short flight of steps from the lawn to the porch is eight feet in width. The days of the narrow flight of entrance steps are over, as far as the bungalow proper is concerned; the wide step lends itself to heavy detail, whereas the narrow "cozy" step must have with it other "cozy" detail, and all must be designed in accord therewith. In a word, the modern bungalow steps are not the "cottage" steps of old.

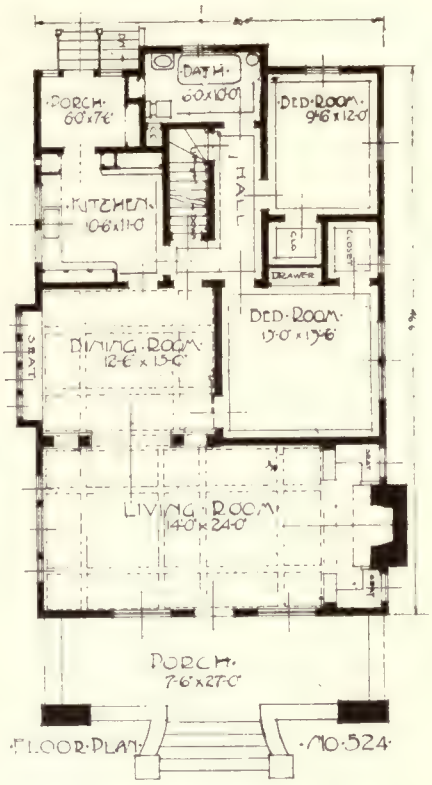
Here also is an extremely wide porch, nine feet from the front wall to the outside of the porch wall; and this porch extends from wall to wall, clear across the width. The stretch of this porch now provides for the long arch type of front, and this is the conspicuous feature of the elevation.

We now step within the house. The main entrance door is placed in the center, and is of good width, three and one-half feet by seven feet in height, and in thickness one and three-quarter inches. On each side of this front door are large windows, the glass being American polished plate. These, you would say, make fine windows, and indeed they do; a beautiful view is to be had from all windows of the front and the left side of the house (the front, by the way, facing east, towards the Cascade Mountains), and



The long arch over front of porch is the conspicuous feature of the elevation.

this fact is well considered in the provision of fine windows; all the view window glass in the living room is plate. The living room is a magnificent room, occupying the full width of the house, and including the ingle-nook is thirty feet long; the width of the living room is fourteen feet. The ceiling of this room is richly beamed, and exquisite electric fixtures are suspended from two outlets centered in the panels. The fireplace scheme is a genuine ingle-nook, "encased" as it were with beam overhead and its own specific treatment, and having cozy corner seats to right and left and art glass windows above.



Now the living room is directly open to the dining room, so that here again the principle of largeness and spaciousness obtained by this method is followed.

The dining room is approximately twelve and one-half feet by sixteen feet in size and has a large, square bay window occupied by a seat, and under the seat is the cold air inlet for the furnace.

The dining room has also a beam ceiling with a center electric pendant fixture.

A very good arrangement of the floor plan is seen in the hall, which is entered from the dining room or from the bedroom adjoining the dining room, giving access to stairs going down to the basement, up to the attic, and also to the bathroom, the rear bedroom and the kitchen. It is seldom one sees a plan which places the rear hall in such a handy manner to the larger number of units of the floor plan.

The larger bedroom has a large closet on the outside wall and the door to this closet has for a panel a full length bevel plate glass mirror. It is to be remarked also that this closet has an outside window, always a very desirable thing in a closet. Another feature of this bedroom is the clever location of the large windows. It is possible in this bedroom to set the bed in any of two or even three positions, and comfortably.

A clever color scheme for this larger bedroom is old rose and soft whitish cream tints for the walls and ceilings and white enamel woodwork. The smaller bedroom a ceiling of white, and walls of quiet blue, the woodwork again in white enamel.

The bathroom is of very liberal size, being about six feet by ten feet in the clear. The cupboard, or "medicine case," as it is commonly called, is cleverly set along side the kitchen porch cupboard. The hot water heater is placed in the bathroom and when treated in white is not an obtrusive piece of furniture in a bathroom where everything is white.

In considering the kitchen, the "kitchen porch" feature must be included. Here we have a kitchen and what might be termed a "rough kitchen," or a "kitchen porch," adjoining, this kitchen porch being completely an exterior member of the house, and being screened in on all sides with fine wire screen. A large cupboard is placed, as part of the equipment of this exterior porch, against the interior wall. The kitchen itself is liberally

equipped. There are two large cupboards, a broom closet, a cooler and a large sink and drainboard. Both cupboards are provided with work table and with bins, and all other conveniences.

This bungalow, though not showing in the exterior any particular earmarks of being a two-story structure, has, in fact, a very spacious upstairs. The stairs leading to the second floor, which is really an attic, are three and one-half feet wide. One great room, a bedroom, with four large closets, and a fine sleeping porch constitutes the floor plan of this attic. Would not such a room as this, with big windows in each end, treated with liberal bungalow art, and with the ceiling all raftered to the ridge, make a grand room? This is a suggestion. Occasionally one sees a treatment of this kind, but it is rare. The sleeping porch is nicely designated, with a center window group, and two small windows at each side of this group, underneath each of the latter a little seat.

The exterior of this bungalow is of distinctly utilitarian design, yet is unique and attractive. The long side lines are excellent, and show a boldness and breadth of treatment very handsome and satisfying. The shingles, of red cedar, set alternately two inches and six inches to weather, make the material for the side walls, and the roof is entirely shingles. The clinker brick chimney, it will be noted, tapers from a width of six feet at the ground line, to three feet at the top, and this tapering feature makes it unusual and also highly attractive.

The arches of the front porch work are done in cement stucco worked on metal lath.

A Home for a Prosperous Business Man

TODAY the slogan one hears all over the country is, "Talk prosperity and you have prosperity," and much proof is back of it. An interesting study in modern house architecture is here presented in a design for a "prosperous business man." In other words, a well built, well planned, roomy home, not pretentious, but of the substantial and even simple type.

This home is built on broad, low lines; it has a wide projecting cornice, the soffit or under part of which is plastered with cement. The roof is of very simple hip construction with red Spanish tile and with a heavy tile ridge roll. Just beneath the second story window sills runs a beltcourse, relieving nicely any tendency toward monotony in the plain cement wall. The window treatment is a particularly noticeable feature of this design. There are plenty of windows of the triple type, well proportioned and correctly spaced. They are of plate glass, simple in design and yet harmonious with the lines of the cornice, sill course, etc., which are somewhat severe in character. A very simple bracketed hood, together with the wide cement steps and buttresses constitute the only entrance. The same idea has been carried out in the designing of the flower urns resting on these buttresses; they are of a low, broad style, matching the house.

Let us go into this attractive residence and see what we have in the interior. The first impression is that of spaciousness. The central hall feature, always so popular where there is sufficient room to use it, leads us at the left into an ideal living

room, with fireplace occupying the center of the end of this room. A pair of French windows open onto the sun porch, while a single glass door opens into a small den just back of the sun room.

Crossing over to the other side of the hall we enter a beautiful dining room with beam ceiling. One is impressed with the simple details of this room, the quiet, unobtrusive design of the buffet, the pleasing wainscot panel in oak finish, porch, divided for privacy into two rooms, each opening off separate chambers. There is a spare room of generous size, back of which is the maids' room, and all chambers are convenient to the bath.

Before closing the description of this residence, desire to speak of the completely equipped basement and of one specially important feature in connection with the heating arrangement. The brick or tile construction of the outside



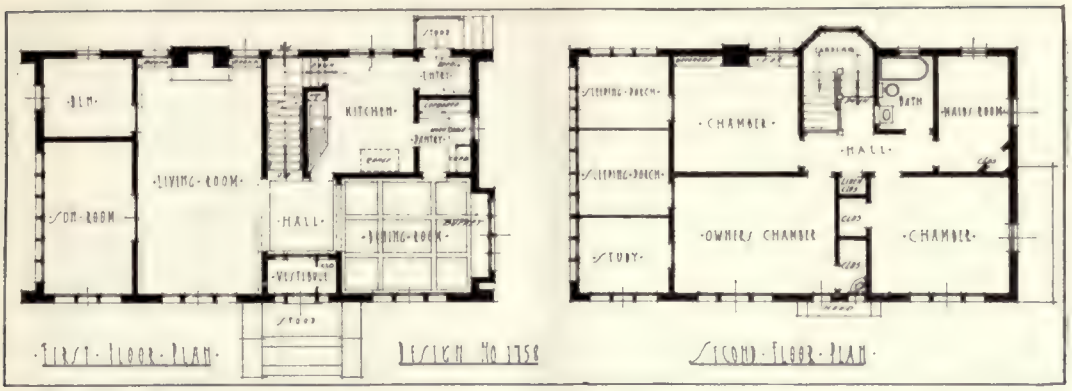
Built on broad, low lines with wide projecting cornice.

making a room in which one certainly delights to dine.

Considerable study has been given to the kitchen and pantry features of this house. Kitchen has a white tile wainscot, the woodwork is enameled and the ceiling tinted in pale blue. The pantry has an abundance of built-in cupboards for dishes, plenty of drawers and apartments for cooking utensils.

One's enthusiasm over this plan is heightened after going over the second floor, noting the splendid arrangement of owner's chamber, off of which is the study and sleeping porch. There are two sleeping porches, or rather one long wall permits of recessing and partly concealing the radiator. The balance of the radiators may be covered by window seats with a wooden grill.

In a home of this character the question of interior finish and decorating is of much importance. If the woodwork and the color scheme suggested and specified by the architect is not closely adhered to, the owner will be wise to employ the services of a strictly first-class decorator. In this house the finish of the living room, dining room and hall is white quarter-sawed oak, to be treated in a soft tone of light fumed finish left in the dull or waxed surface. The floors are also of quarter-



sawed white oak and are indeed beautiful. The floor of the kitchen and pantry, carried out into the entry, is laid in yellow pine, very inexpensive, the idea being to cover these floors with a good grade of linoleum. In the bathroom and vestibule floors are of tile, otherwise throughout the second floor beechwood is used, the standing finish being white pine, enameled, with birch doors stained mahogany. Fir lumber is used for the floors of the sleeping porches, which being enclosed, are finished with plastered walls and ceilings. All in all, this is a splendid home for the prosperous business man.

A Small Summer Cottage

JOHN HENRY NEWSON, Architect

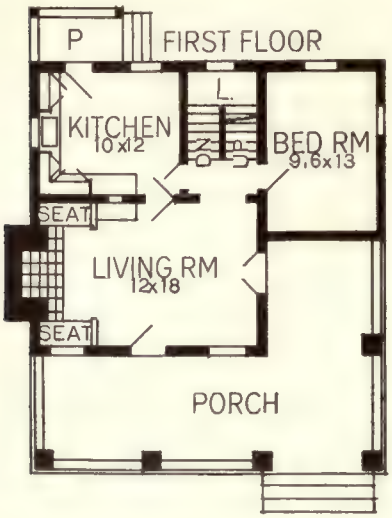
(Description and floor plan follow on next page)

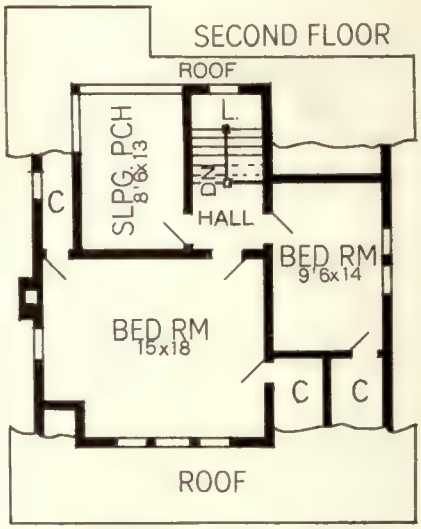


Wide shiplap siding gives a pleasing exterior treatment.

A RESIDENCE greatly in contrast to the preceding house, just described as a prosperous business man's house, is the little summer cottage of five rooms. It is a pretty little home with a roomy porch, always wanted on a summer residence. The porch is covered by extending the main roof beyond the wall line of the house proper, and the porch is enclosed. Wide shiplap siding is used on the outside. There is a foundation wall of concrete blocks, smooth face, and basement provided for furnace.

In this design we have a plan which is admirably suited for a seaside cottage. The bedroom on the first floor could readily be changed into a dining room if desired. This would probably be done by anyone using this design as a city residence for an all-the-year-round home. The first floor has a combination living and dining room. On the second floor there are two chambers and sleeping porch.





A Brick Cottage with Spacious Porches

THERE are a number of excellent inexpensive bricks on the market, and as this material always makes a most permanent construction, though somewhat more expensive than frame, we are glad to illustrate an interesting design of the cottage type for brick construction. You will note the roof lines of the spacious porch are the predominating feature. The house was designed for a west front exposure, with large porch on the front and side facing the south and west. The exterior lines are quite simple. The brick work is laid up in colored cement mortar. The roof is shingled, and for this house the shingle stain should be moss green.

Entering through a large vestibule we come into a generous size hall running clear through the center of plan. The living room is of generous size and opens by wide casement into a den. The latter room is provided with a group of four windows facing the east; just at the rear of the hall is provided a toilet. On the

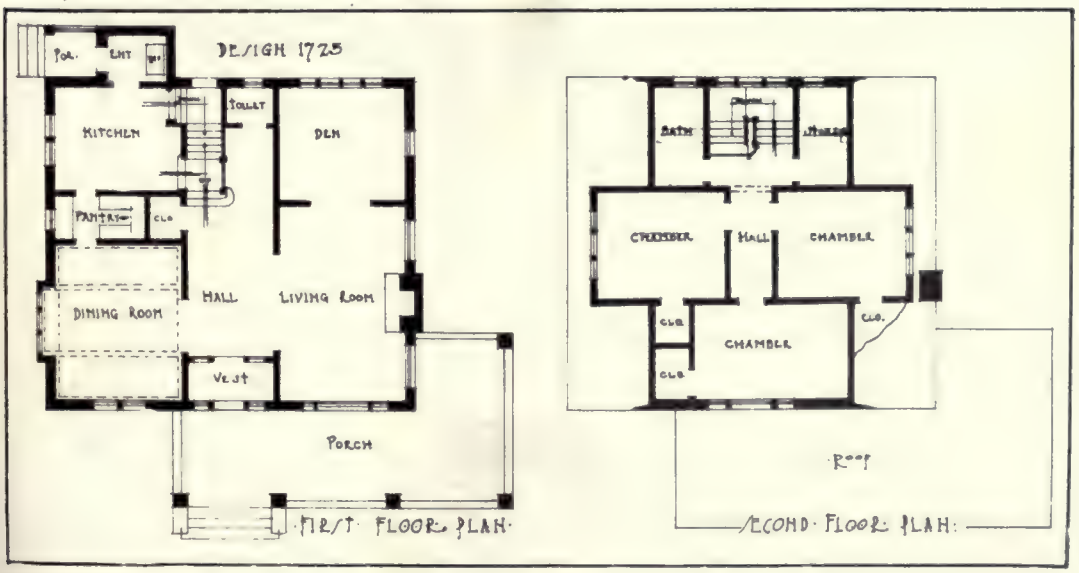


The roof line of the spacious porch is the predominating feature.

opposite side of the house we have an interesting arrangement of dining room with intervening pantry to kitchen. Stairway is combination, which reduces the expense by eliminating the necessity of a separate back stairs.

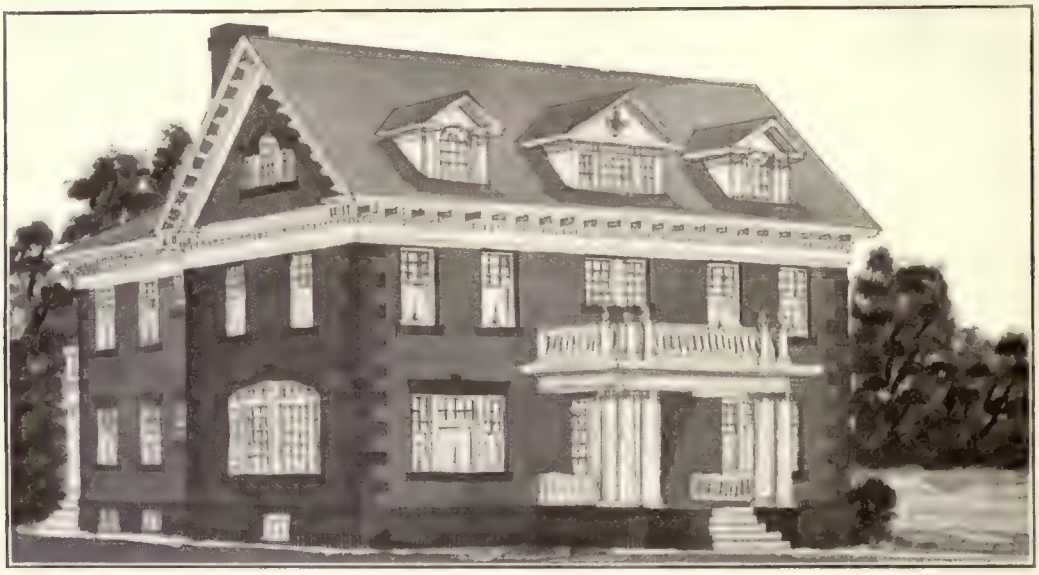
Three good chambers are provided on the second floor, opening from a central hall. There is also a bathroom and large storage room flanking the stairs.

On account of the low lines of roof there is no attic, but the house is large on the ground and the basement provides ample opportunity for storage in addition to the usual heating plant, laundry, etc.



A Home with Elaborate Colonial Treatment

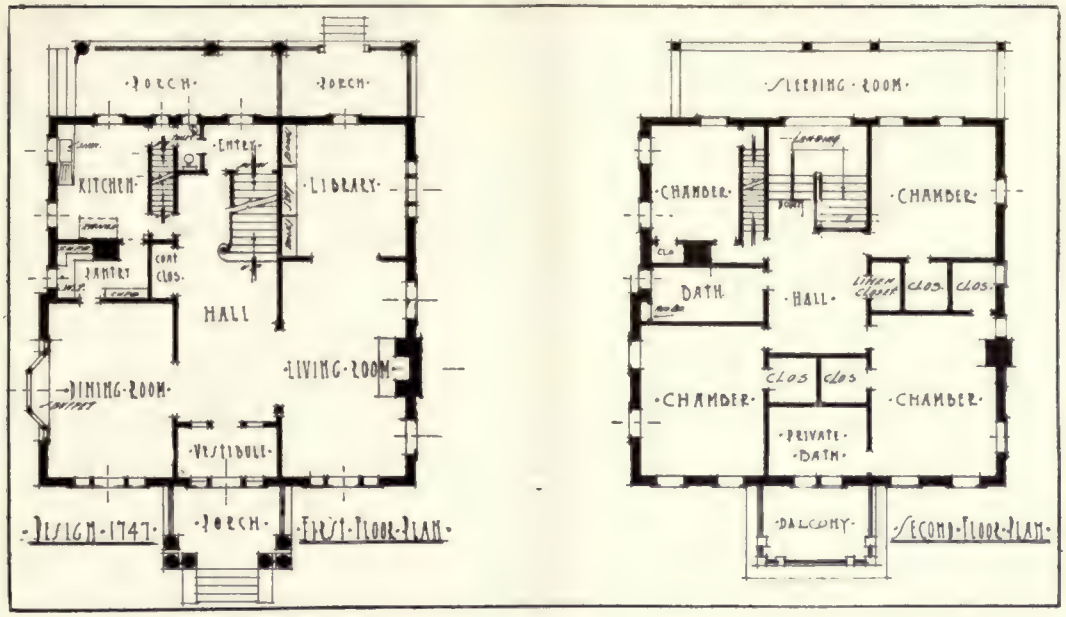
THE good old Colonial treatment is just as popular in this twentieth century as it was in the middle of the seventeenth century, when so many of the historic Colonial houses were erected in the eastern part of the United States. The only difference between the home builders of today and those of the seventeenth century is the builder was not bound by the limits of a city lot.



A small entrance porch is shown in front while the main porch is at the rear.

To erect a real Colonial home, with its elaborate Colonial treatment, both as to exterior and interior, requires considerable ground, for it is in this treatment more than any other type, that the large center hall is the predominating feature. To carry out in detail the spacious stairways found in the old Colonial mansions requires considerable space. The stair treads are liberal and width of stairs will vary from five to seven feet. The landing should be spacious to provide space for the antique grandfather's clock. The opening between the living and dining rooms into this hall must be of generous width. Hence, with a hall from ten to fifteen feet in width a living room on the one side of some fifteen feet wide, a dining room on the opposite of the same width, we have for the house alone a total area of some forty-five to fifty feet. This requires two of the average width city lots, while three or four are much to be preferred.

In the design shown in the illustration the main porch is to the rear, with a small Colonial entrance porch in front, the width of the vestibule. The plan is most complete in all its details, the rooms are large, airy and well lighted. A front and back stairs is provided, the back stairs extending from basement to attic, where a good ball room with good ceiling height, three dormers in the roof and windows



in the gable ends, provide good light and ventilation.

The chambers are all roomy, each having at least three windows, providing cross ventilation, and each having an extra large closet. The owner's chamber connects with a private bath and two large closets, one with an outside window.

In the basement is a large billiard or amusement room, a laundry, dry room, fruit and vegetable rooms, fuel bins and furnace room.

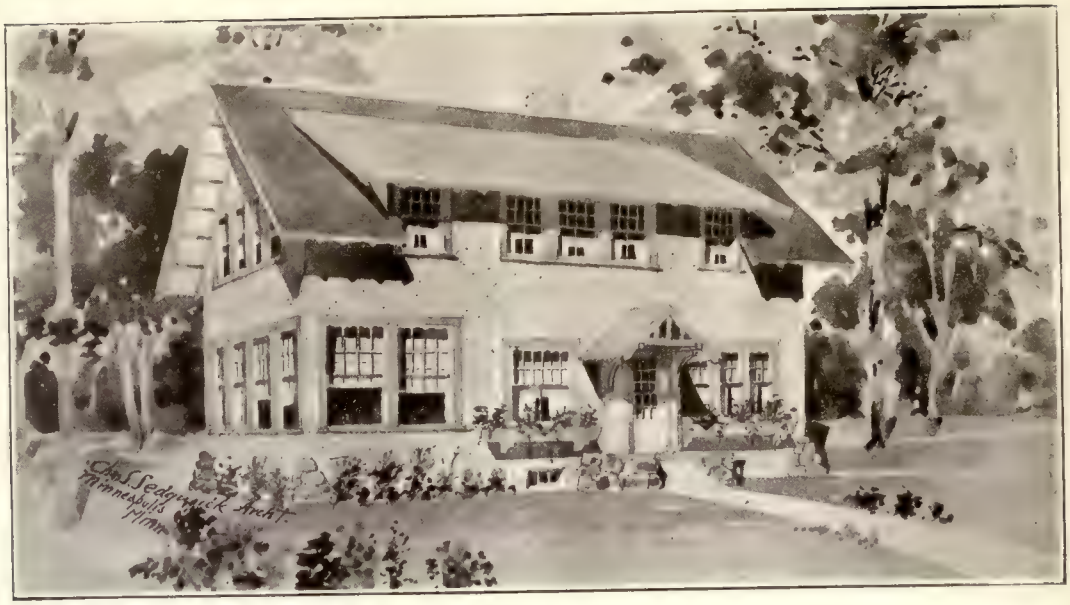
The exterior walls are of tile, with a four-inch veneer of Colonial brick, with a slate roof; all exterior woodwork painted white.

The floors for the first floor are quarter-sawed white oak; second floor in birch; bath in tile. Woodwork white enamel with mahogany doors, further carrying out the Colonial effect in this home.

A Wide Front Cottage

CHAS. S. SEDGWICK, Architect

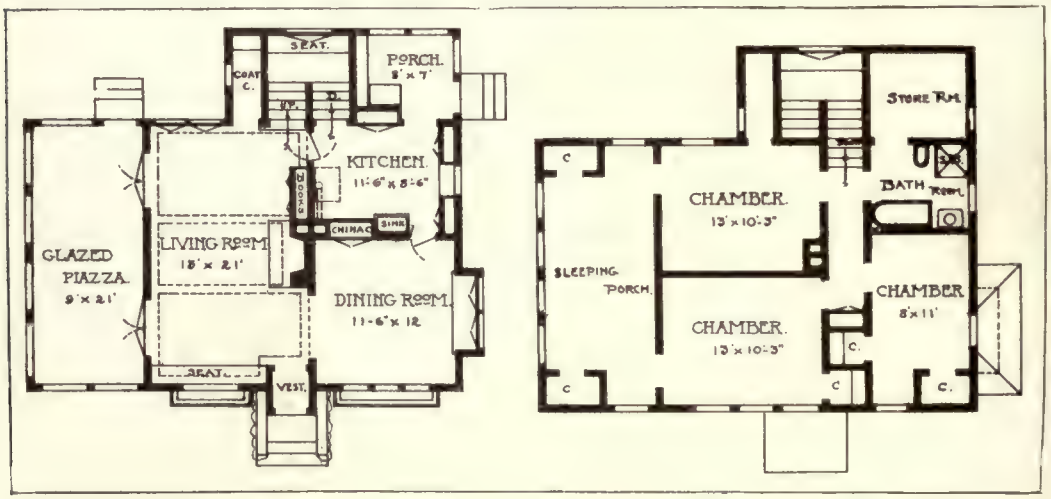
THIS cottage has had careful study to secure all possible conveniences with a wide front and shallow depth at lowest cost. The plan is regular in outline, with a very simple roof treatment and the outside walls kept low, using fourteen-foot studs. The first story is eight feet six inches high, second story eight feet high. The chambers are full height with square ceilings. Estimated cost from $3,000 to $3,300, not including heating plant. The central vestibule entrance opens into a large living room thirteen feet by twenty-one feet, finished with a plain, heavy beam ceiling, the main stairs leading up from the rear are liberal in width and made with a wide platform with seat and small casement window on the landing. The basement stairs underneath lead down from kitchen, with a grade entrance on the rear, a very convenient feature. The arrangement of cupboards, china closet, etc., is complete and the liberal rear porch



The plan is regular in outline with simple roof treatment.

glazed-in affords a good space for refrigerator and space for shelves, also a side entrance to kitchen.

The first floor is simply cased with pine or fir casings stained brown, and the floor is birch. There is a basement under the main house with cement floor. The second story has three good chambers and a fine sleeping porch, all provided with ample closets. The bathroom, directly over kitchen, is ample size, with shower bath and a store room opening back over rear porch. This second floor is also finished in stained pine with birch floor. It is designed to build the cottage in a thorough and substantial manner, with the outside covered with cement stucco and all trimmings, cornices, etc., stained brown and shingles stained red. All window sash painted white and the entrance front door white and enameled, this will give a very pretty effect. The piazza and sleeping porch are plastered and finished same as balance of house.

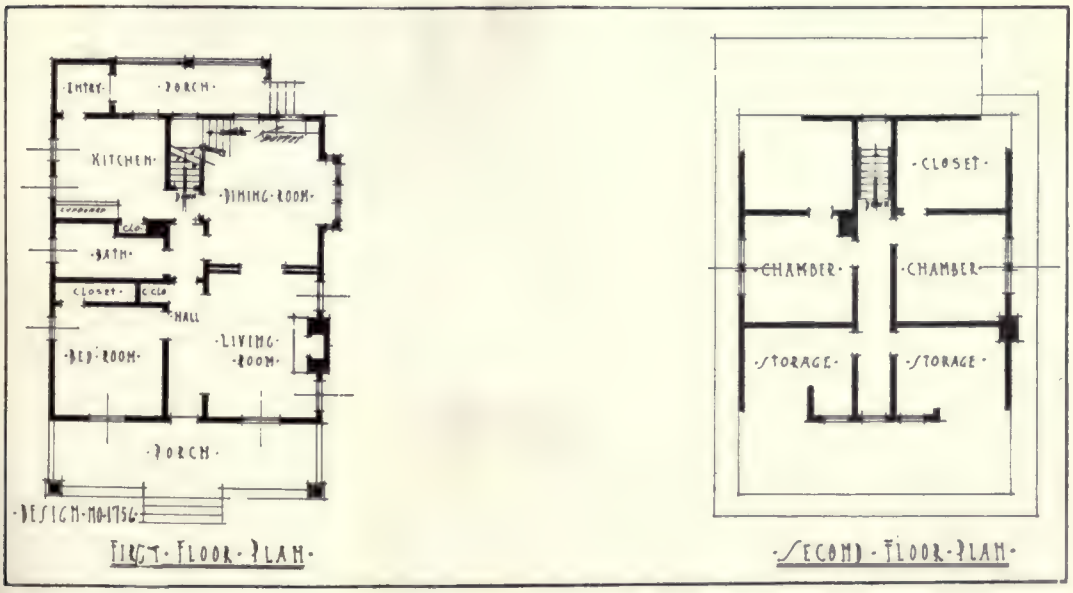




Rough-sawed drop siding, cement and shingles combine to make a very pretty exterior treatment.

A Small Cottage-Bungalow

INQUIRIES frequently come to this magazine to publish designs of the bungalow order, but with second floor room accommodations. We have designed a small bungalow of this type, using a combination of materials in its construction, namely, rough-sawed drop siding, to be stained and to be used up to the first story sills. Above, a beltcourse of cement to top of window sills and then in the



gables stained shingles. There is an extreme overhang to the roof, with exposed rafters, and we might term this cottage a semi-bungalow.

The interior arrangement is quite a little different from the planning of many cottage homes and has been given much study in getting accommodations for three bedrooms. This is secured by direct approach from the entrance into living room or living room hall, and planning a bedroom on the opposite side. This bedroom can have direct connection with the bath if desired by reducing the size of the large closet separating bath from bedroom.

On the second floor, while the wall height is not much, it is sufficient to get two sleeping apartments. This bungalow, constructed as we have just described, is very inexpensive and would be an excellent one to build for a summer residence without full basement. Probably it could be completed for close to $2,500 or $2,600.

A New Seven-Room Bungalow

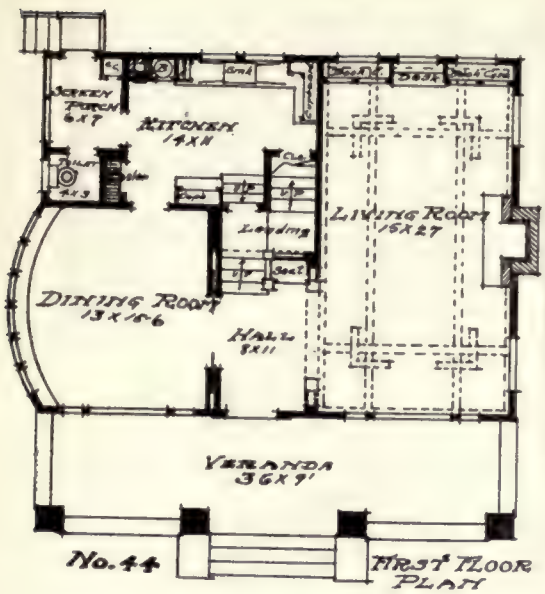
BUNGALOWCRAFT CO., Architects

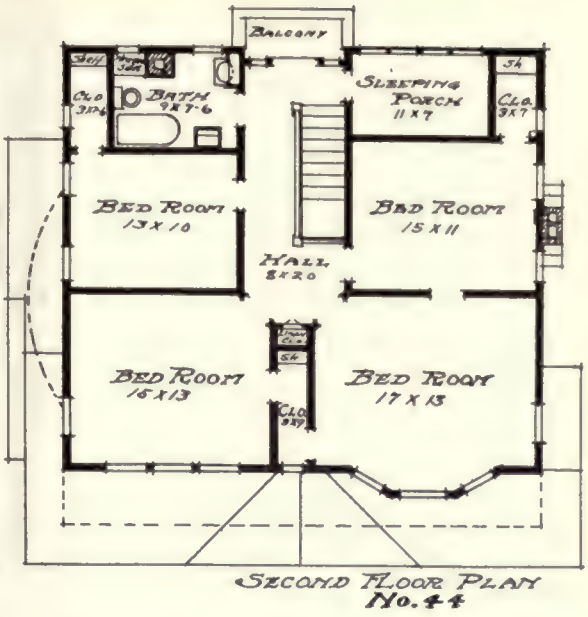


Designed to make housekeeping and home-making easy.

A COMMODIOUS, convenient bungalow home with a fine atmosphere of hospitality inside and out. It is not pretentious nor showy, but just a good, well arranged house. A home that any family would delight to call their home. This bungalow has recently been built in California for $3,200, without cellar or furnace. In Vermont, with warm construction (sheathed and papered), with full basement, including hot air heating and plumbing, it cost $3,650 complete, ready to move into.

Exterior is weatherboarded, roof shingled, front porch work of artificial stone, porch floor and steps are of cement. The inside arrangement should be noted carefully. It is designed to





make housekeeping and homemaking easy, and this house is a good example of the results obtained.

The stair arrangement (front and rear) is especially good; the dining room, with broad swell bay, is an attractive feature. There are four large closets and a linen closet on second floor. The bedrooms are large. An open-air sleeping porch, so much in demand, is well provided within the walls proper of the building.

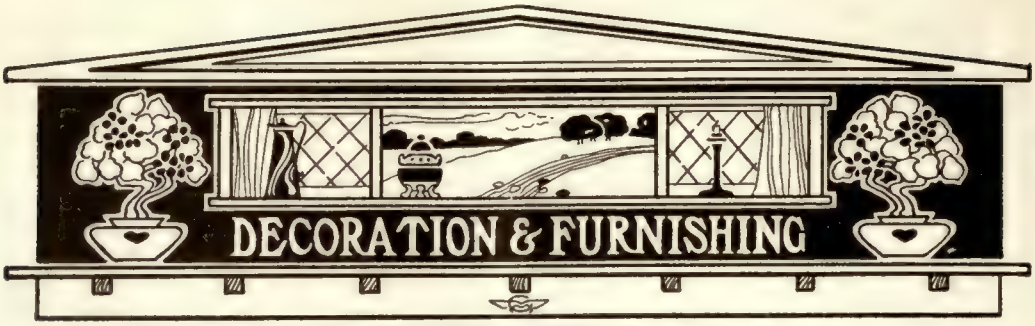
KEITH'S

April BUNGALOW Number

20c

The next issue, April, will be devoted the ever popular Bungalow. It will be *"All Bungalows"* and will be the biggest issue of Keith's Magazine ever published.

NEWS-STANDS
20c



Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Combined Living Room

THE average house of the detached type is small, its floor surface limited and cut up into several rooms. When the ground floor is divided into several rooms, no one of which is more than ten feet square, it is almost impossible to get a good general effect. When, as often happens, each of these rooms has a distinct color scheme of its own, the result is really distressing.

Anyone who has lived in lodgings on the other side has become familiar with the room which frankly combines the offices of a dining room and a sitting room. Space is precious, the housekeeper argues, therefore why sacrifice a whole room to a use which only occurs three times a day. Therefore, sideboard and dinner table have their end of the sitting room.

The standard of middle class living is much better in America than in Great Britain, and few of us would put up permanently with their somewhat higgledy-piggledy arrangements, but a modification of their plan might be adopted in many houses with good results. The small sitting room and the smaller dining room might be merged into one large room without much inconvenience or change in the household arrangements.

In planning a house with this arrangement, it is well to make a little more of the hall than might otherwise be done. If it is a long, straight one at one side of the house, a bay or jut thrown out at its side will give a corner in which the casual guest can be entertained at need, and a couple of feet added to its width will convert it from a passage into a room, especially if the stairs are on the inner side.

Another point to be borne in mind is the necessity of a china closet between the living room and the kitchen, large enough to hold everything required for the service of the meals, and equipped with a swinging door at either end. In the arrangement of the room you should lay as little stress as possible on its use as a dining room. It is such for a short part of the day. The rest of the time it is a sitting room.

Naturally the rear end of the room is the one to use for meals. It is to be hoped that it is well lighted, for nothing is so melancholy as to eat in a dim light, and some special arrangement for artificial light should be made. If electricity is used, a single pendant bulb of high power well shaded is ample lighting for an ordinary table. In a recent article I had something to say about the use of lamps on the dinner table, and a lamp is specially convenient in this case, as it can be left on the table between meals and furnish it sufficiently.

The dining table should be almost anything rather than the ordinary extension table. A round table looks much better than a square one, and if the room is furnished in mahogany there is quite a choice of circular tables, not strictly dining tables, but available for that use. For the family of two, one of the swing-top tables which become settles when the top is swung over is an excellent choice. They are not expensive, costing something like eight dollars in hardwood, finished in any desired tone. Most of them have a sort of box beneath the seat, which is very use-



Part of the Exhibition Room of The Bridgeport Wood Finishing Company's Service Department, Craftsman Building, 6 East 39th Street, New York City. This room is an architectural and a decorative gem. In the cabinets arranged around the wall are shown real samples of average house trim illustrating over one thousand different effects.

A VISIT to the Service Department of The Bridgeport Wood Finishing Company in the Craftsman Building, 6 East 39th Street, New York City, will give you a wonderful inspiration and many valuable ideas for the finishing of the interior woodwork of your home.

If you are building or refurnishing a home, you have your cherished ideals of what that home shall be: beautiful woodwork—harmonious decorations and furnishings—everything in keeping with refinement and good taste—an expression of your own individuality.

You may know in a general way what you desire in artistic woodwork, but you may not be able to express your ideas in concrete form. You may not be able definitely to picture the finished result from the architect's sketches and plans.

Very well. Our Service Department, located in the new and widely known Craftsman Building, 6 East 39th Street, New York City, will give you exactly the assistance you need. This Service Department is maintained for the benefit of home owners, architects, decorators, painters, wood finishers and others interested in the most artistic finishing of woodwork in the most practical manner.

Our Service Department exhibits over one thousand different effects obtained with

BRIDGEPORT STANDARD WOOD FINISHING PRODUCTS

—and it shows these effects exactly as they can be duplicated in your house by any competent painter or wood finisher. These effects are shown on real average house trim and not on fancy panels.

The *very newest* things in wood finishing effects are shown. All woods are represented—from the most costly to the most inexpensive. Really surprising results are shown on some of the commonest woods used in building construction. It is an everyday occurance for visitors to express astonishment at the wonderful effects obtained on ordinary pine and cypress.

Our Service Department will give your individual requirements *personal* attention. Not only will it show you the different kinds of finishes most appropriate for the woodwork in *your* home, but it will also advise with your architect, decorator, painter and wood finisher and show *them* exactly the results they can obtain with our goods and the methods to be employed. This service is free to you and it is invaluable in obtaining the most satisfactory results at the most moderate cost.

Whether you are building a new home or redecorating or refurnishing a room, we urge you to call on us and obtain our ideas and co-operation. We can promise you a real treat. If you cannot find it convenient to visit our New York Service Department, write to us and we will gladly give you the most efficient service and ideas by mail.

The Bridgeport Wood Finishing Company

Service Department, The Craftsman Building **6 East 39th Street, New York City**

ful for holding small silver and napkins between meals.

Where many people are to be served, a corner of the room can be used for the table, with a built-in seat carried around it. The table is set in front of this seat, and chairs are used for those sitting at its outer end and side. When the table is not in use for eating it is convenient for writing or drawing. A table for this use would generally have to be made to order, although some of the Mission tables are of the right length and proportion. If one has to be made, the sort which has a heavy top resting on supports of the trestle order is the best kind to have.

Tablecloths are rather out of order for this impromptu sort of eating. A centerpiece and doilies and a long runner with square doilies for the places at the sides of the table are less trouble than the traditional damask and look much better. Between meals the table should be supplied with some sort of a cover, a length of tapestry or velveteen, or a piece of embroidery in colors.

A large screen of some sort is almost essential to this double use of the room. Behind it a meal can be finished in decent seclusion, if visitors arrive, or the table be laid for the next. To be really efficient, such a screen should be six feet high and four-fold. It is much less expensive than buying one ready-made to have a frame made by a carpenter, with the lower crosspieces weighted, so that the screen will stand firm, and with a second crosspiece inserted midway of each panel. A good width for the panels is twenty-four inches, as they can then be covered with the half-width of any of the wide upholstery materials. When a less expensive covering is desirable, a very good-loking screen can be made with burlap. In this material the most satisfactory color is tobacco brown, which fits into most rooms well. The screen will look much better if the covering is put on with ornamental nails, those of wrought iron being best for the purpose. As I have so often occasion to remark, it is a great help in getting up anything of the sort to study the finish of those of its kind shown at a good furniture shop. Especially in the use of nails does the amateur too often betray himself. Always drive in the first nail in the exact center of the section, the next one in the middle of the half-section, and so on, each nail bisecting the space left.

While a sideboard is out of the question for a room of this sort, a built-in closet with glass doors is always a pretty feature, and while its shelves are used for silver and china, the drawers beneath will be useful for papers and work as well as for table linen.

Fender Cushions and Cushions.

The fender stool, long, narrow and without a back is very popular in England and occasionally finds a place before our own open fires. The fender cushion is intended for people who like to get on a level with the blaze. It is not unlike a round bolster, heavily stuffed with hair. Three feet by ten or twelve inches is a good size. The material is usually gathered together at the ends, finished off with either a tassel or a pompon.

The handsome embroidered sofa cushion is brought up to date by ripping its ends, sewing on two strips of gold braid over the lines of union with the plain silk back and gathering the ripped ends together making a cylindrical cushion.

Other cushions are shaped exactly like a long, narrow bed pillow and are finished at either end with a rather scant double ruffle headed by a cord and tassels going around the pillow and tied in a bow.

What To Do With a Landscape In Oils.

As a rule oil paintings are not strikingly successful in the average house. They do not harmonize with either water-colors, blacks and whites or brown photographs and if hung in the same room need a wall space to themselves. Often, too, the color of the wall is not a good background for an oil. A delightful disposition for a low toned landscape or for just the right sort of a figure study is to leave it unframed and fit it in to the central space of a wooden chimney piece. The picture, thus made a part of the structure of the room and surrounded by dark wood, has a dignity and value which it would never achieve in a gold frame and hanging on a wall.



Send for this Book

How to prepare and care for

BEAUTIFUL FLOORS

Probably you take more pride in your floors than in anything else about the house. Most women do, for they know that as housekeepers they are judged by their floors.

Therefore, believing that you want all the information you can get on how to finish and care for floors, we have written a very complete and thoroughly reliable discussion of the subject.

Our Book, "Beautiful Floors"

although free, might well be purchased at a good price, for (if followed) it will save a lot of money and disappointment. If you don't know how beautiful, how cheap and how easy it is to care for waxed floors, you should learn. You should know also, that Old English Floor Wax, because it is made from the harder waxes, gives a harder, more durable and more beautiful finish than soft, cheap waxes. A can will cover a bigger surface and is therefore most economical—50c worth will cover a room. Hardware, Paint (Drug) and Housefurnishing Departments sell it.

Send for a free sample and for this new book, "Beautiful Floors, Their Finish and Care." It is an illustrated text-book on floors and gives a lot of information you will value on

Finishing New Floors	Finishing Dance Floors
Finishing Old Floors	Kitchen, Pantry and Bathroom Floors
Hardwood Floors	Finishing Furniture
Pine Floors	Interior Woodwork
Cleaning and Polishing	Stopping Cracks
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THE A. S. BOYLE CO., 1924 Dana Ave., Cincinnati, O.

Old English Floor Wax

Set Six Screws—

and Save $13.25

It takes six minutes to drive these six screws, and the saving is $13.25. Now if your time is worth more than $2.21 a minute, don't read any further. This advertisement is for those who want high-grade furniture at rock-bottom prices and approve a selling plan that actually saves big money.

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Come-Packt Furniture for these substantial reasons. Here is an example of Come-Packt economy.

This handsome table is Quarter-Sawn White Oak, with rich deep, natural markings, honestly made; beautifully finished to your order. Two drawers; choice of Old Brass or Wood Knobs. It comes to you in four sections, packed in a compact crate, shipped at knock-down rates.

Our price, $11.75. With a screw-driver and six minutes you have a table that would ordinarily sell for $25!



No. 300 Library Table Come-Packt Price $11.75

in the white. Finishing materials 50c extra. Shipping weight 150 lbs.

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for living, dining or bed room Color plates show the exquisite finish and upholstering. Factory prices. Write for it today and we will send it to you by return mail. M2d

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Mr. Keith guarantees his subscribers a square deal with any of his advertisers.

Guest Chambers.

A writer in a recent number of the London Spectator calls attention to the fact that only the Anglo-Saxon races consider a guest chamber indispensable, only they admit strangers to the intimacy of their family life, and he attributes to this fact the breadth of mind which distinguishes them from the continental nations, in which no stranger need apply for admission.

Whatever the psychological explanation may be, the guest chamber is considered essential in American families, and a great deal of thought and care is lavished on its furniture and equipment. Too much, in fact. Most of us could write a chapter on "Guest Rooms I Have Known" which would not be unmixed eulogy, but rather a chronicle of fussy elaboration defeating its own end of ministering to the pleasure and comfort of the guest.

In many houses the double bed lingers in the guest chamber alone. Worse still, a penchant for the antique has prompted the acquisition of a four-poster bedstead, upon which the guest lies in state, as on a catafalque, and from whose dizzy height, when occupied by two people, one of them has been known to fall to the floor. Not that it is not quite possible to make an antique bedstead perfectly comfortable, but it is very seldom done. And if one must be used for a guest, at least supply a stool or a set of steps with which to make the ascent to it easy.

If you have people to stay with you for long visits, the more nearly the guest chamber approximates to a sitting room the better. Instead of a bedstead have a comfortable three-foot cot which can be made up in the morning and covered with some sort of a drapery. Have a couple of tables, one of which can be used for writing, the other one with drawers, in which all the apparatus of the toilet, pin cushion, combs and brushes and hand mirror can be shut away from sight, and with a mirror hung above it. For holding clothes, use a tall chiffonier, or better, have a good sized desk with drawers in the lower part. If it is not convenient to have your guest use the bathroom, conceal the washing arrangements behind a screen. Two or three basket chairs, a simple rug and a few good pictures, a good candlestick, a vase or two for flowers, a reliable clock, a waste basket and a shelf of interesting books, and you will have a room in which your friends can be comfortable and pleasantly occupied in the morning hours when you are busy with your own affairs, and where they can see special friends who are not your friends. Too many hostesses make the mistake of ignoring the fact that the guest has interests of her own which she may not care to share, any more than she expects to share all theirs. Also the most devoted friends can see too much of each other.

But take the guest room of the more conventional type. Spend as much money as you like upon its fittings, but do not let it be fussy. Do not regard it as the proper place for all the elaborate fancywork which your friends have given you from time to time, or for the bric-a-brac which does not harmonize with the decorative scheme of your lower rooms. Nor, worst of all, equip it with piles of old magazines, on the assumption that they will acceptably pass the time for your guest. But if you should be moved to place in it a large inkstand, clean and full, two or three usable pens and pencils, a sheet of blotting paper and a supply of plain white paper and envelopes, you will earn many a grateful thought.

For the Chippendale Sofa.

It is very easy to spoil a room by choosing the wrong fabric. The delicate outlines of the Chippendale chairs and sofas demand an inconspicuous upholstering, and the material should at least suggest silk. Armures and other small patterned silks are the best choice, and the material may well be fine, as the quantity needed is so small. Never obscure the beautiful back of a Chippendale chair or sofa with any sort of a cushion. The canework of a good piece is as interesting as carving. The same thing applies to the Jacobean pieces.

A dull violet, by the way, is most effective as cushions for a long Chippendale sofa with a back in cane filled sections. Another good color is a dark old rose, the rather faded pastel shade, which tones in so beautifully with dark wood.



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¶ OAK FLOORING $\frac{3}{8}$" thickness by $1\frac{1}{2}$" or 2" face can be laid over old floors in old homes, or over cheap sub-floors in new homes at a very low cost. **It is cheaper than carpets or Pine Flooring.**

¶ OAK FLOORING laid forty years ago in public buildings, after very hard service, is still in **good condition.** For **durability,** OAK is the **best.**

¶ There is a **solid satisfaction** and **lasting pleasure** in the **substantial** and **dignified appearance** of OAK FLOORING.

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¶ OAK FLOORING is made in seven different grades—representing different prices to fit the pocketbook or condition under which they are used. There is no limit to the uses of OAK FLOORING and the prices are such that there is one or more grades adaptable to every class of construction.

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This Book Will





Help You Build

"Practical Homebuilding" begins with the selection of a lot and the location of the house upon it. It discusses cellar, wall and roof construction, and describes the most approved methods for each. It contains comparative costs of frame, stucco and brick. It is profusely illustrated with photographs of attractive houses, drawings of floor plans, etc.

In addition to its general features, "Practical Homebuilding" explains why Kno-Burn Expanded Metal Lath is the logical base for stucco and plaster work.

One interested reader said that it covered the subject "from loam to lace curtains." We want you to have it *now* whether you are going to build this spring or sometime in the dim future.

Send 10c to cover cost of mailing and ask for booklet No. 659.

North Western Expanded Metal Co.
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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Curtains and Hangings.

H. H. R.—I am enclosing interior plans of first floor. The living room extends across the west side of the house with large private porch in front. As the living room has so many windows, I thought I would like gray-green tinted walls and have old rose-flowered chintz over-hangings at the windows, with cream voile curtains. The hall I think I shall have in light gray with red hangings as I have a gray Navajo rug with red and black figures which I wish to use in this room. The dining room puzzles me.

Can you give me suggestions for coloring my north dining room; also I would be grateful for any other suggestions you could offer, etc.

Ans.—You have indeed a nicely planned house, and your own ideas as to decoration and furnishing are in the main very good indeed. You have evidently read *Keith's* to some purpose.

In regard to the lower floor, your plans for hall and living room are good, except in the matter of curtains. The chintz is not suitable for living room furnishings. The coloring and pattern are very pretty, and for use in a sun parlor, or even a den furnished in wicker, it would be excellent, but it is not good enough for living room curtains, especially to use with mahogany furniture. Nor would we advise scrim, which has been done to death. In this living room, we would use a soft cream Madras with rose-colored pattern in all over-design, and no other curtains. We would veil the French doors with the same, having very *slight* fullness shirred on small brass rods placed top and bottom of the door itself. Or, if you cannot find such material, though we have it here, you can use a simple sprigged *net* for glass curtains and over-curtains of old rose Sun Dure in plain material. The rug then should have much old rose running into mahogany. The dining room wall below plate rail we would have a russet or reddish brown, and it should be protected by using burlaps or paper imitation. Then above, the *prettiest* wall would be old gold with cream ceiling. Curtains of old gold Sun Dure, and no other curtains.

Your plans for the second floor rooms are very good, except that we should reverse your idea of the doors and woodwork, making the *doors* mahogany stain, and the remaining woodwork and window sash white or cream. In this way the doors will look right from the hall, and the rooms will be prettier.

For the Small House.

F. A. H.—Having just bought a small house, we wish to make some changes in decorations. The room on front of house we will have to use as a bedroom at present. Kindly let me know what curtains and paper to use on this room, with white bedroom set.

The living room opens on the west side of house. We have a three-piece mahogany set with dark green curtains; also large green rug with tan and white in oriental design. Would like your idea about paper and window drapery.

The dining room opens off living room, and also has westerly exposure. Having dining room set of dark oak, please suggest window drapery and paper for walls.

Ans.—We see no reason why you should wish to make any change in the woodwork of your house, as *dark* mahogany, especially if it has a brownish cast, is not objectionable with the dark oak furniture of the dining room. The principal trouble comes in the front room where white furniture is to be used, for while dark furniture is good with white wood trim, the reverse is not so. It would be better to put dark

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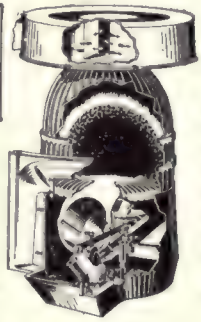
HERE'S a big house in cold Illinois. 10 rooms, exposed on all sides. The kind that's usually hard to heat. Yet read the letter. We have thousands of others like it from Underfeed users telling of warmer, cozier homes, and a saving in fuel bills of from ***one-half to two-thirds.***

Carbondale, Ill., March 11, 1914.

Gentlemen: I have used one of your Underfeeds three winters and am highly pleased with it. From the day my furnace was installed in October to the 20th day of March my coal bill was $20.25. I have a ten-room residence and the entire building was heated all through the winter. We are not bothered with dust, gas nor smoke.
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Cut-Out View of Furnace

Showing how live coals are always on top. This is the candle principle. A candle gives a clean, smokeless flame only when flame is at top. Turn a lighted candle upside down and see the difference.

In the Williamson Underfeed, the live body of fire is always on top in direct contact with the most effective radiating surfaces. Coal is fed from below, underneath the fire. No smoke, no gas, no dirt. All these are consumed, giving more heat. Every bit of coal burnt to a clean white ash. Clinkers virtually unknown. And this year sees the Underfeed brought to a still higher degree of perfection in the New-Feed UNDERFEED. No stooping to feed in coal or shake down ashes.

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No special coal is prescribed for the Williamson New-Feed UNDERFEED. Any size can be used successfully. Cheap, slack soft coal; and pea or buckwheat hard coal, or larger sizes if desired. It's all the same to the Underfeed. Adapted to warm air, steam or hot water. May be installed in any building, new or old, or to replace ordinary furnaces, boilers, stoves or grates.

50 Per Cent Saving Guaranteed.

We guarantee a saving of your present coal bills of at least one-half where the Williamson New-Feed UNDERFEED is properly installed and operated. This guarantee is backed by a $1,000,000 company. Send the attached coupon today, for our great free book "From Overfed to Underfed" which fully explains just how the New-Feed is operated and how it effects this great saving.

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Tell me how to cut my coal bills ½ to ⅔ with a Williamson New-Feed.

Warm Air.....Steam or Hot Water.....
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furniture with such woodwork. In either case we would paper the walls with one of the pretty small-patterned gray papers, have a rug with old blue predominating, and carry the blue in plain material, into over-draperies at the windows, with ruffled white muslin under-curtains.

For the living room walls we advise a soft ecru paper in some plain or small design textile effect, with cream scrim on a figured net for curtains. We should not want any more plain green in this room than the covering of the mahogany pieces unless it is well lighted. In that case, green sunfast could be used at the windows at side hangings. The fireside chairs would be prettiest in green wicker, with cretonne upholstery in rich colors, like bunches of dull pink rhodendrons with green foliage.

We do not think a grass rug suitable for dining room use, and in this northwest room we would not use green. We advise a Scotch or body brussels rug in brown tones with light golden brown grass cloth paper on the walls and old gold sunfast for curtains. No other curtains are needed. We suggest Wilton or Saxony rug for the hall in oriental design with rose or mulberry tones shading into maroon predominating, with old rose colored madras or figured sunfast at the windows, though cream figured lace or net could be used. A 6x9 rug on the main part of the hall floor, if supplanted by a stair runner in the same pattern running out in front of the entrance door, would be the ideal arrangement.

Pine Finished Interior.

J. E. R.—Am sending a diagram of the first floor of the new home we are building. The house faces the west.

All woodwork used in the interior is pine, stained oak. Entire hall has hardwood floor. Living and dining rooms have 3 ft. of hardwood around floor. Please give me information as to what colors to use in hall, living and dining rooms; also please state what kind of curtains and blinds to use.

An examination of your floor plans shows well arranged rooms but not very large.

As the fireplace projection takes up much of the living room space, we would not think many pieces of furniture would be advisable. However, a very good arrangement would be to place the davenport or sofa directly in front of the fireplace with the library table backing up to it. This would permit utilizing the current from the center light fixture for the reading lamp on the library table. In the recess on each side of the fireplace you could place fireside chairs, and these can very well be of wicker, stained brown and upholstered in a printed linen or cretonne to harmonize with the room. The remaining pieces we would advise to be in fumed oak. A fern stand in oak, with cane panels, placed in the bay window, would be very attractive.

We would keep the three main rooms in tones of ecru and golden browns, using soft ecru tints on the walls of the living room and hall, and an old gold in the dining room. The rug in the living room we would have in brown, cream and rose tones, and in the hall let rose or a soft old red predominate in small rugs and stair carpet.

A small table for card tray and a hall chair seem to be all the furniture that the hall space will permit. These pieces in fumed oak also.

In the dining room we would have a green rug and green and gold sunfast draperies at the windows. The living room curtains of cream-colored net or lace in an all-over design, with the same in the hall.

As you have given no intimation regarding the color of your exterior, we can not advise you as to the color of your window shades, but we would reverse your plan, using white on the inside of the shades with a color harmonizing with the exterior for the outside.

General Criticism.

E. E. C.—May I avail myself of your kind offer of help in meeting interior decoration problems? My home faces the west and north. The living room and vestibule are tinted ecru with reddish brown stenciling, woodwork, Oregon fir, stained mahogany, mahogany furniture, wide Queen Anne windows. Have Wilton rug with ecru ground, brown, red brown and dull green. Please criticize. Dining room woodwork, fir-stained gold-



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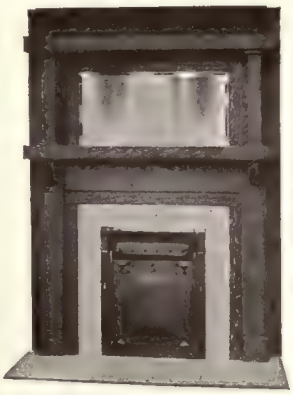
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ANSWERS TO QUESTIONS—Continued

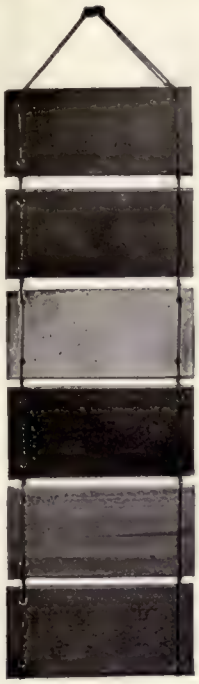
en oak. Wall above plate rail tinted greenish gray, stenciled a dull green; group of narrow Queen Anne windows with south exposure; small library north of dining room with pair of small leaded glass casement windows; furniture of both of rooms, golden oak. Bookcase colonnade separates the rooms with leaded glass doors to buttresses. Please sugges treatment of casement windows as to hangings. The northeast bedroom has casement window also; walls tinted canary yellow-cream stenciling. Walls of library a little lighter than dining room stenciled a darker shade of same color. Please suggest rugs for dining room and library; also color of tinting for upstairs rooms with low ceilings; one room with west and north low double windows; furniture, light oak; the other room with east window, same shape.

Ans.—We have no criticism on your treatment of the living room, which is very good.

We regret, however, that you did not use a bog-oak stain on the dining room and library fir, as these rooms divided by colonnade must have continuity in the treatment. You have given this, but the color selected for the wall tint is unfortunate for the library. This north room, with its small casement windows, needs lighting up badly, and the greenish gray wall is the worst possible background. However, something can be done.

As the dining room, notwithstanding its group of south windows, is not very light, touches of yellow can be introduced. We advise rugs alike in both these rooms, and would choose a moss-green with reddish brown and yellowish or old gold tones combined. At the group of windows we would use old gold sunfast draperies on the outer sides only of the group, with a valance running across the top. No other curtains.

The yellow or old gold can be carried into the library with silk hangings on the casement windows well pushed back to show the leading. If the casements open inside, these must be run on small brass rods on the sash itself, preferably top and bottom. If you could also add to your stencil decoration some touches of yellow and brighter green it would help very much.



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YOU will also find our Birch Book helpful. It describes and illustrates in detail the many uses of Birch for interior trim, doors, floors and built-in work and is a source of reliable information upon Birch.

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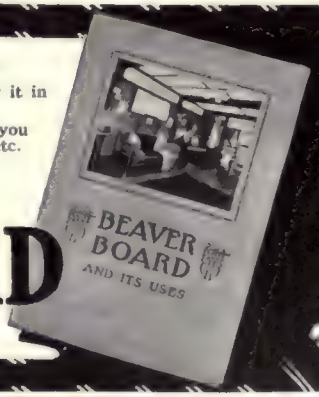
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Home of Architect James H. kitchie, Newton Center, Mass.

Roof, one color; Side Walls, another.

Keep the American Dollar at Home.



By "The Economist"

WITH the importance that electricity now plays in the lives of home builders, it is necessary to keep in touch with the new articles of equipment, that the greatest economical value may be derived from their electrical systems.

Several such articles have recently come to the notice of the "Economist," and a short description with illustrations is here given.

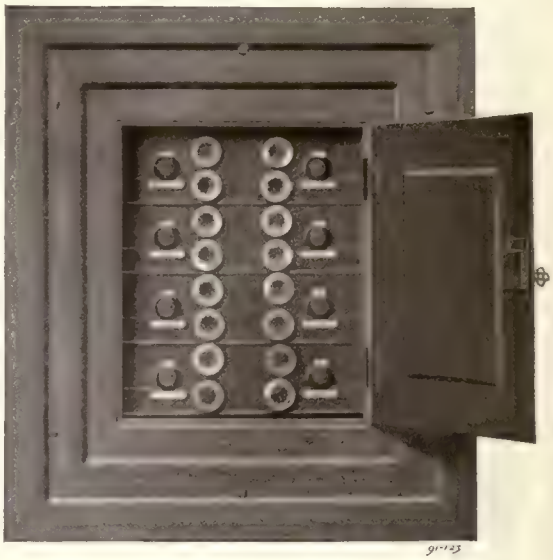
Dead Front Distributing Panel.

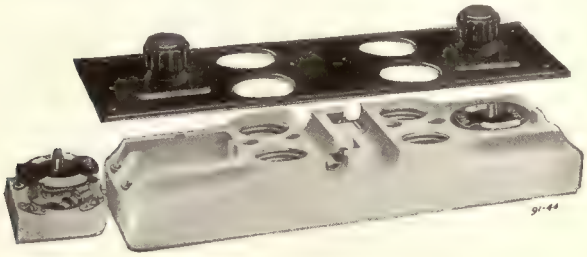
This new distributing panel is for use in residences, office buildings, stores, factories, etc.

All connections and conductors are concealed and separated from the front of the panel by a continuous sheet of insulating material. There are no live parts exposed.

In case a switch mechanism requires adjustment, the cover of the particular unit affected can be quickly removed, and the switch mechanism can be replaced or a new one substituted just as quickly.

"On" and "Off" appear in plain English —the former is in black letters on a white background, and the latter in white letters on a black background, so that the condition of each switch may be distinguished at a distance. The fuses are self-indicating, and can be replaced by any one without the slightest danger of contact with the circuit, and without the use of screw drivers or other tools and the attendant danger of using them.

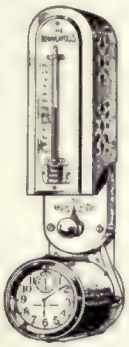




It is claimed that the same service cannot be obtained for as little money by any other system. The ease with which the parts are assembled minimizes installation cost, and the device itself, on account of its stability, is inexpensive. Panels can be assembled for considerably less than $1 per circuit.

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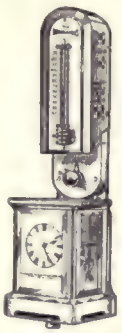
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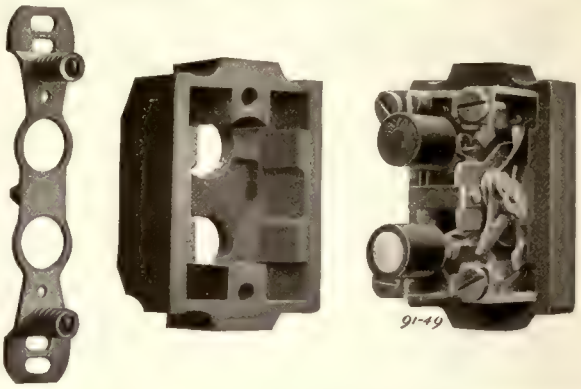
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The regular finish of these panels is dull black covers and black switch handles. White enamel covers and white handles can be had without additional cost, and a large variety of finishes on covers is available for those willing to pay the extra expense.



A New Push-Button Switch.

A new push-button switch with a substantial, molded insulation cover for the mechanism instead of the usual sheet-fibre cover.

This leaves nothing of a brittle nature for workmen to chip or damage before or during installation. It makes the switch dirt-proof, and eliminates opportunity for grounding because it is thus completely enclosed.

The supporting yoke shown to the left of the accompanying illustration is not in contact with any metal parts of the switch. Slots in the recessed ears of this supporting yoke used in connection with special head screws, furnished with each switch, permit any necessary adjustment.

Automatic spring-tension adjustment bushing for the face-plate screws prevents over-tightening of these screws and prevents "buckling" of the face-plate. The liability of the screw driver to slip and mar the screw or face-plate is minimized. These springs also adjust the screw heads to the counter-sinks in the face-plate.

The escapement spring of this new switch performs no other function. The switch will operate even if the actuating spring is broken. The actuating spring is large in diameter and has more coils than are usually employed, insuring easy action and long life.

The screws which hold the mechanism to the base are staked to a brass strip in the groove on the back of the base before being covered with insulating wax. Thus these screws cannot be loosened.

The "out" button projects only 5-16 of an inch beyond the face-plate. The stroke of the buttons is only 3-16 of an inch, which effectively overcomes oscillation or "hanging" below the plate.

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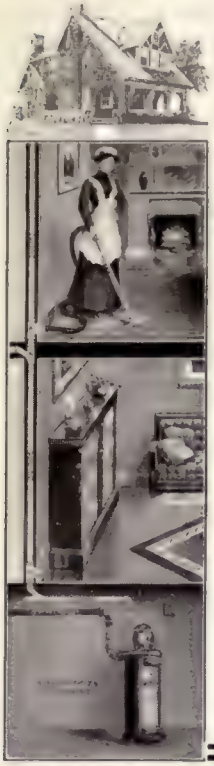
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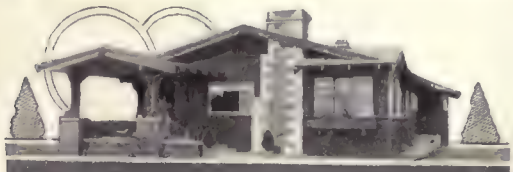
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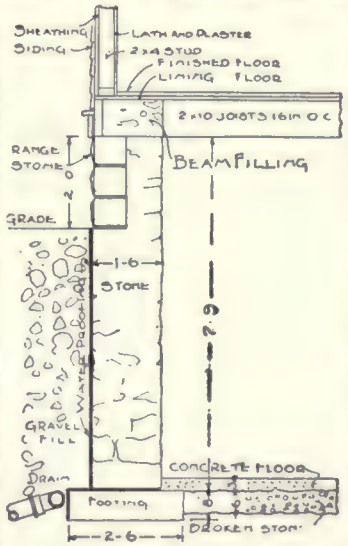
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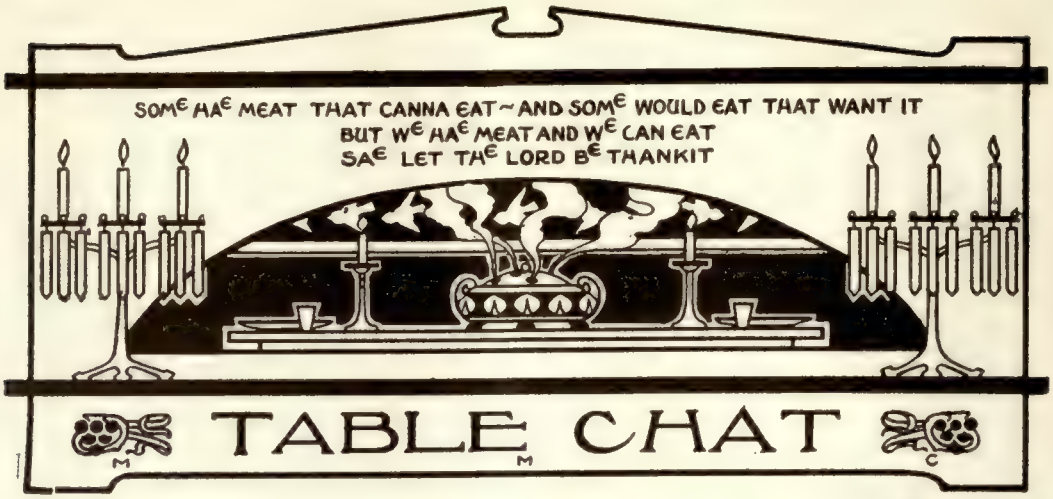


(Fig 6)

SECTION THROUGH BASEMENT WALL

Published by

M. L. KEITH, 820 McKnight Bldg., Minneapolis, Minn.



Varying the Midwinter Table.

BY the middle of February the table is apt to settle down to a dead monotony of heavy food, nourishing, doubtless, and rich in the heat producing elements, but not especially appetizing. This is a deplorable state of things, and one for which there is no excuse. It does not require very much invention to provide a succession of vegetable soups and vegetable entrees, palatable, nutritious and economical.

Take the vegetable soups: tomato, potato, onion, beet, lentil, white or black bean, celery, split pea, green pea, corn, cabbage, there you have a sufficient variety to keep you going for two weeks, and many of them are susceptible of several variations. Take tomato soup, so easily made from canned vegetable. You may have it plain, with a flavoring of onion, celery seed and paprika. The addition of milk makes it a bisque to be served with croutons, and a third delicious soup results when you add its own bulk of beef stock.

Common white beans, the cheapest of all the legumes, make a capital soup, either alone, when they may have an addition of milk, or with the addition of tomatoes. One way to vary a white bean soup is to chop an onion, a carrot, two or three stalks of celery and a bunch of parsley very fine, fry them in butter and add them to the strained soup. This is the chef's way of accentuating the flavor of his soup greens.

Black bean soup is so very good that it ought to be better known. Its making is rather complicated but the routine of the processes is easily acquired. It is a good plan to have it for the beginning of a picked up dinner, as it is so substantial, but do not follow it with an omelet or any other preparation of eggs, or top off with a custard. One appearance of eggs is sufficient for a single dinner.

The various cream soups are all good, despite a certain similarity of taste. They depend for their goodness upon a liberal allowance of milk and butter, and the thickening should be put in the form of a roux of butter and flour cooked together. It is a good plan to pass grated cheese with them. It may be Parmesan, but a sharp American cheese answers very well. Your grocer will often sell the odds and ends of a large cheese very cheaply, and you can grate them into a glass jar. Grated cheese will keep a long time in the corner of the refrigerator.

Some Vegetable Entrees.

The fashion of serving a vegetable as a course by itself might well be popularized. It gives a desirable variety to a simple meal and the vegetable gains in appreciation when eaten by itself. There are two sorts usually served, those which are stuffed and those which are cooked au gratin, either with or without cheese. Either is far more substantial than the vegetable plainly cooked, and is a sufficient course by itself, with an accompaniment of bread and butter, although it is more correct to serve the vegetable entirely alone.

To be stuffed a vegetable must have a definite shape and be of sufficient size to be scooped out in the middle. Only just

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138 Clyde Park Ave., Grand Rapids, Mich. (1)

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SIMPLE—easily applied—rust-proof—non-rattle—and practically unbreakable. Positively the best storm sash and screen hangers and fasteners you can buy. If not at your dealer's, send for samples today. Hangers only, 10 cents retail; hangers and fasteners, 25 cents. Catalog sent on request.

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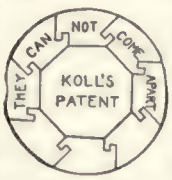
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"Pergolas"

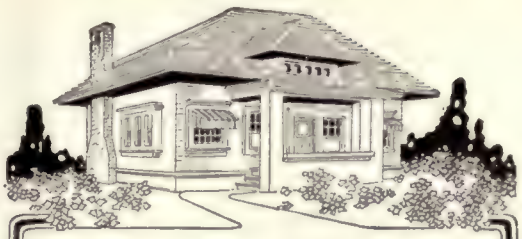
AND GARDEN ACCESSORIES

Pergola Album—"G28"—illustrates Pergolas, Garages, Lattice Fences, Veranda Treatments and Garden Accessories; will be sent for 10c. in stamps.

Catalogue "G40"—containing very useful information about Exterior and Interior Columns, will be sent to those who want it for 10c. in stamps.



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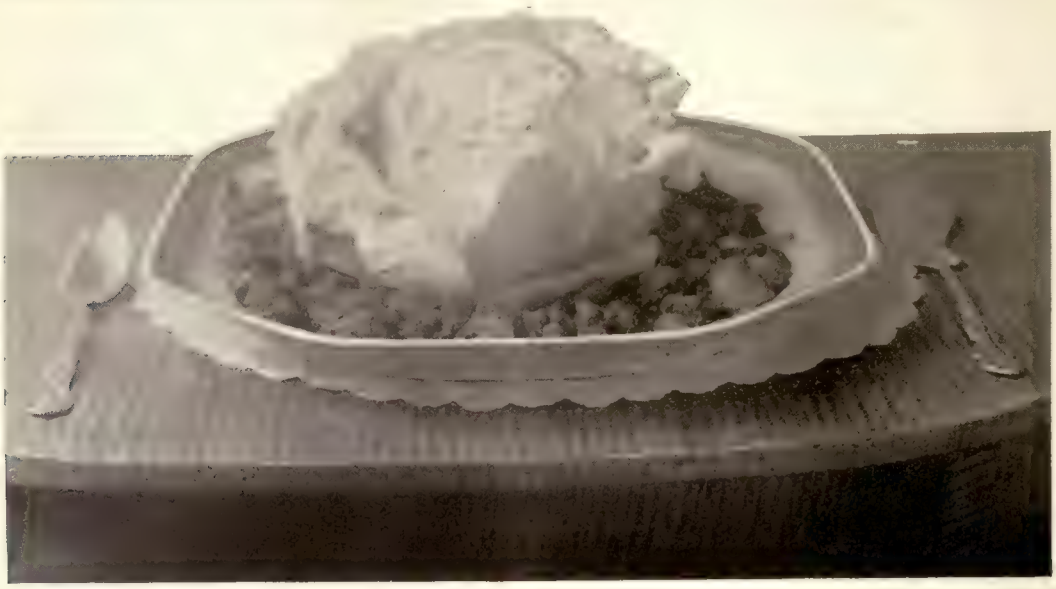
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Stuffed cabbage.

enough of the outside should be left to hold together. Egg plant, sweet or Irish potatoes, cabbage and squash and, in their season, tomatoes and sweet peppers, all stuff well. The stuffing may be either of the vegetable itself chopped or mashed and highly seasoned, or it may be of some sort of force-meat. The odds and ends of meat which accumulate in the course of the week can be utilized in this way, and so can the accumulation of meat and vegetables which remain after the solid part of a beef stew has been eaten. Mutton or lamb, however, are seldom very good when used in this way. Chopped green pepper, parsley, or even a few oysters are a great addition to a forcemeat, and a very little crisp bacon, finely chopped, will redeem an otherwise tasteless mixture.

The au gratin process is quite a different matter, and can be applied to the tenderer and less substantial vegetables. The vegetable is cooked in salted water, cut into pieces, covered with a cream sauce, finished with a layer of bread crumbs dotted with bits of butter with perhaps a sprinkling of cheese and browned in the oven. Two vegetables are sometimes put together, potatoes and onions, tomatoes and onions or tomatoes and corn. The suggestions for seasoning stuffed vegetables apply to this other preparation as well. The process is admirably adapted to the use of the casserole.

There are songs we heard in childhood,
Like the memory of a dream,
But they are not half so cheerful
As the gurgle of the steam.



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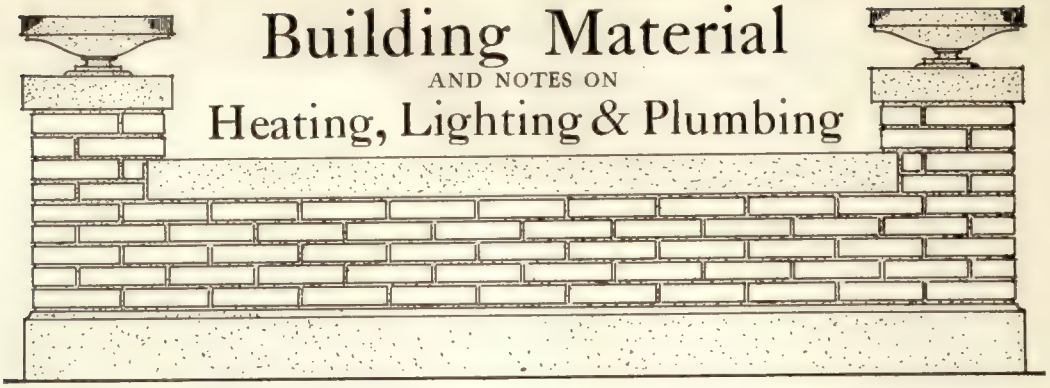
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Why are Lumber Prices Low.

The following paragraphs are extracts from an interesting discussion on the existing conditions in the lumber industry by H. R. MacMillan, Chief Forester of British Columbia:

THE paramount position of the forest industries in the Northwest cannot be stated too often nor in too striking terms. In our commercial fabric it is the warp around which other industries are woven. The production of lumber is the pioneer occupation which opens up the new districts, brings employment, transportation, clears the land, furnishes markets for the settler and brings into the country the wealth upon which other industries are supported.

"Measured in terms of annual production of wealth the lumber industry both in British Columbia and in the northwestern states ranks high above its nearest competitors — agriculture, mining and fisheries. In British Columbia of every dollar in the pocket of the wage earner, merchant or financier, 33 cents is from the forest. In Washington, Oregon and Idaho the lumbermen are still more productive—42 per cent of the public wealth of Washington, 45 per cent of the public wealth of Oregon and 31 per cent of the public wealth of Idaho is derived directly from the logging camps, saw mills and other forest occupations.

"We in the Pacific Northwest pride ourselves justly on the beauty and size of our cities, upon our growth in population, upon the magnitude and stability of our financial institutions, factories and supply houses and upon our transportation facilities. These institutions are the conspicuous organs of our commercial body. The lumber industry is the heart of that organization, constantly pumping through it the nourishing financial blood without which it could never have grown, and without which it could not maintain even its present size.

"It is unnecessary to state here that the wealth brought into the country by the lumber industry does not remain in the hands of the lumberman. The lumberman's dollar is one of the world's best travelers; of every dollar, 40 cents goes to transportation companies, 35 cents to labor directly employed in the industry, 15 cents to merchants for equipment and supplies, 10 cents for interest on capital invested. This analysis of the lumberman's dollar discloses the source of our prosperity.

"The lumberman of this forest region may pay directly each year to transportation companies $80,000,000, to wage-earners, $70,000,000, to merchants, $30,000,000, and for the use of borrowed working capital, $20,000,000. This money is later circulated into every portion of the community, and forms an important factor in the livelihood of those few people who do not come into direct contact with the lumber industry.

"The manufacture of lumber at the present time is the one great industry of North America which is operating at a serious loss. The situation can be stated in a few words. It costs on the average $15 per thousand to produce lumber. This lumber is now being sold at $10 to $12 per thousand, and the public at large is not sufficiently informed concerning the production and marketing of lumber to realize the situation.

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"One-third of the saw mills must stand idle all the time. Lumber prices are kept low by the bitter fight maintained by mill owners endeavoring to keep their mills in the operating column.

"The public may ask, 'Why are so many saw mills built?' The answer is to be found in the cost of carrying timber. There are 890 billion feet of standing timber in private ownership in Oregon, Washington, Idaho and British Columbia. The 470 billion feet of publicly owned timber is also coming gradually into the market. The private owner must, therefore, even after allowing for a greatly increased consumption of lumber, look forward to the possibility of carrying his timber for fifty years.

"Great quantities of this timber were purchased at $1 per thousand. To repay interest at six per cent on the investment with no allowance for profit, this timber must double in value every ten years. During the past five years the annual tax rate has increased rapidly, some owners having found it to treble in this period. Investments in standing timber produce no annual income. Taxes and fire protection require a continual increasing annual investment of fresh capital. Many timber investors in British Columbia and probably the same is true in the northwestern states, invested too large a proportion of this capital in timber and are embarrassed by the lack of income or the necessity of finding fresh capital to meet carrying charges. These conditions, the certainty of interest charges, the uncertainty of increasing tax rates, the necessity of turning timber into cash, even at a loss, have decided many owners to build mills even when they know that the mills cannot be expected to return more than a portion of what they have invested in cash in the stumpage."

Building a Concrete Chimney.

An examination of fire statistics would show that defective flues are the cause of a great majority of the fires that occur in dwellings. It is an old saying among architects that money put into a thoroughly good chimney is never wasted. So far as safety from fire is concerned, the chimney is the most important structural feature of a building. But almost countless fires have shown that careless workmanship, and in some cases bad design, in chimney construction prevail to an alarming extent.

A properly constructed chimney should be a seamless monolith, and in recognition of this fact builders are now using concrete. Concrete chimneys are poured in a plastic state and harden into so much solid stone. They have no joints, and sparks or burning soot cannot come into contact with surrounding woodwork.

Small concrete chimneys can be constructed in two ways. An outer and inner wooden form, between which the concrete is poured, can be used, or the inner form may consist of a clay or concrete tile, either round or square in section. Where the tiles may be procured easily, it is a more simple operation to use them for the inner form.

All chimneys, regardless of size, should have good foundations. If the chimney is not carried down to the depth of the cellar, it should have the foundations at least below frost line. For ordinary conditions a depth of three feet below ground level will suffice. The foundation consists of a concrete slab 12 or 18 inches thick and 9 inches larger on every side than the outside dimensions of the chimney. Where the house is constructed with concrete walls, the chimney is cast as an integral part of the walls, and, consequently, needs no separate foundation.—*American Carpenter and Builder.*

The Farmer and the Radiator.

In the big cities snow is not welcome. It is a losing proposition, for hundreds of thousands of dollars must be spent to get it out of the way of the heels and wheels of traffic. But out in the country it's different—snow is received with open arms. It is the protector of tender plants that are waiting to produce crops in the

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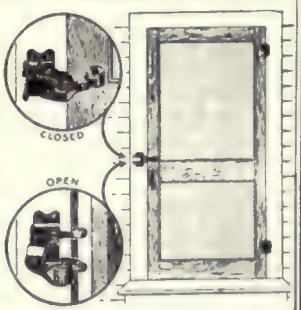
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spring and summer, and it fills the soil with moisture.

While New Yorkers and Philadelphians were wading ankle-deep in slush, and the street departments were spending all the money they could get, the Kansas farmer, with his feet on the radiator—formerly the baseburner—was contentedly figuring up what the last five-inch snowfall should be worth in wheat or corn.—*New York Times.*

Wooden Houses in Europe.

Wood holds its own in parts of Europe where timber is much scarcer and of higher price than in America. This is true particularly of house building in rural communities. The special measures taken by the Swedish government in recent years to promote the increase of small holdings and the widespread use of timber in the construction of houses and farm buildings in Sweden attracted attention sufficiently in England the past year to cause the sending of a committee to Scandinavia to study the subject at first hand. The committee's report brings out some interesting points regarding the universal use of timber for constructive purposes in Scandinavia. The committee found, what is often a surprise to visitors to a country where timber is a natural product, that house construction in wood is not appreciably cheaper than brick, even in Sweden. Outside the large towns first-class houses constructed entirely of wood are in great favor, and in many cases afford striking architectural studies, which the sylvan surroundings invariably blend into a charming picture. Indeed, Swedish experience affords valuable evidence of the durability of good timber construction, and Swedish architects say that timber buildings may be relied upon to last fully fifty years.

Comparatively little trouble seems to be experienced from dry rot or insects. This is largely accounted for by the fact that timber buildings are always well elevated on a stone or other foundation, which permits of free circulation of the air, and in most cases the ground is dug out over the whole or part of the site to form a cellar. Further, Stockholm tar is frequently used as a preservative. The report includes particulars in the form of specifications and priced schedules of quantities for the construction of timber houses and stone and timber farm buildings for a typical Swedish small holding.

The subject of wooden houses in England is being investigated along other lines. A writer in one of the London papers has been digging among old records in Ireland and finds that framed houses were dispatched with immigrants from London in 1613 and erected in the Diamond at Londonderry and in the Diamond at Coleraine for occupation by the English settlers. Some of these houses were in existence and tenanted up to about 1850.—*The Building Age.*

Ventilation.

The art of ventilation has even a broader field than that of heating, as there is scarcely an industry in which human endeavor is engaged that could not employ the art of ventilation in some form to its advantage.

The ventilating engineer has done a great deal towards improving the healthful condition of our buildings by providing means for adequately removing the vitiated air from the rooms and replacing it with pure, fresh air from the outside and he has still further demonstrated the advantage of cleaning or washing the fresh air before delivering it into the building. He has also found that the quantity of moisture in the air is a factor that affects man's condition and efficiency. That the regulation of this moisture is beneficial and the term "conditioning" is becoming a familiar word and will soon become as frequently used in the trade as the word "heating" is in its connection with ventilation.

There is still some unexplained difference between the air as delivered into our buildings and the outer air, that makes the latter more healthful. Probably the most frequently suggested remedy for ills by physicians is "keep out of doors all you can." There is a reason for this, and it is within our province to search for the causes of, or the reasons for, this difference. The search will probably enable us to demonstrate that air can be still further conditioned to make the inside air as beneficial as the outer.—*Heating and Ventilating Magazine.*

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Dead Air Space to Keep Out Dampness.

T. L. D.—I would like to inquire in regard to ventilation in cement buildings. I have constructed a building 28x70 ft. by 18 ft. high of cement blocks 6x12x24 in. with an air space in them. The walls of building are now closed at the top and bottom, having a dead air space between. I have been told by a party that there should be outside openings in the wall to allow free circulation of air, and that it would prevent the building from becoming frosty and damp.

What would be the best—to leave it as it now stands, with the dead air spaces, or put openings at top and bottom in the outside face of the wall for air circulation? I want to prevent the building from frosting, as I have machinery installed which would be damaged by the dampness.

Ans.—I do not consider your building should be damp just as it is constructed, provided that the quality of the concrete mixture was good in the blocks. It is a great deal better to have a dead air space than a live air space in the wall and in all buildings where the walls are insulated, the theory is to have the space sealed to secure the best ventilation. That is, the air should not be in motion. Do not, therefore, put any openings in your walls in the effort to secure a circulation of air in them. If you do, the results will be contrary to what you are seeking to secure—a preventive from frost and dampness, and the smaller the air space the better.

Gutters.

W. L. S.—Will you kindly tell me if you prefer a hanging gutter to a box gutter on a brick house 34x30 ft. Kindly state how much cheaper the hanging gutter would be.

What is your opinion on building a stone mantel in the living room, or do you recommend a brick?

Ans.—In the building of a good brick house as large as you state, 30x34, it would be better to have a built-in gutter and not consider using a hanging gutter. The latter, of course, are less expensive, and the difference in cost would depend somewhat on the style used, as there are several different styles of hanging gutters. A simple one is a half-round galvanized iron gutter, which is tied to the building with galvanized iron straps. This is probably the cheapest.

Regarding the matter of a stone mantel would say that a brick mantel is much preferable. It is rather uncommon to see a fireplace built of stone, excepting in the case of a rustic cottage where cobblestone or fieldstone are used.

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SPLINTERS AND SHAVINGS

Adapting the Exterior to the Building Site.

NOTHING is quite so attractive and suitable for a house situated on a rocky elevation or in a rolling country, with rocks and trees as the background, as a house with a lower story of field stone, with an upper story of either shingles or stucco, with a tile roof to brighten the color scheme.

Such a house seems to spring naturally out of its surroundings and lends itself well to the landscape. Field stone has a variety in color that makes it a charming foundation for a house so situated; add to this an upper story of stucco in a warm tone, perhaps decorated with trim that relieves plainness.

A type of house that is suitable for almost any suburban locality is the frame house, with the exterior walls of clapboards or shingles. In building a frame house, however, it is necessary to have a design that is fitted for the site. With either clapboards or shingles an exposed foundation of brick or stone is correct. Solid concrete as well as the stucco finish on a wooden frame lend themselves to certain styles of architectural work.

The Tile Roof.

A frame house should have a roof of shingles and stucco finish should preferably be roofed with tile, in harmony with the design of the house. A great deal of attention is given nowadays to the architecture of roofs. First of all, a roof must fulfil its functions of protecting the interior of the house, but it should also bear some relation to the landscape.

A home that will fit into almost any landscape in coloring is a combination of brick and shingles, with shingle or tile roof, tile being preferable owing to its fire-resisting qualities. A pretty variation in a house of this kind is a use of tapestry brick over doors and windows.

Weathered shingles for the second story are in some cases an attractive combination, especially where the house is near a shore. Stained shingles of a dull green make a neat upper story combination with the brick and tile roof, and they can be carried into the construction of the porch with excellent effect.

Another attractive combination is the first story of concrete or stucco, with an upper story of shingles.

An attractive combination is a dark red stucco lower story with green or weathered shingles above. The roof of this type of house should be tile and should be of a sloping and rambling construction, so as to bring into play all the color in the roof material to offset the upper story of the house.

Entrance the Keynote.

The most careful attention should be given to the architecture of this important exterior feature of the house, for the doorway, by its very character, either invites or repels. A broad, inviting doorway suggests hospitality, and, no matter how unpretentious, it should harmonize with the general architectural scheme.

The living porch should open from one of the family rooms and should have an exposure that will give plenty of air and sunlight. Such a living porch can be made to serve the purpose of a dining porch, one end of it being reserved for that purpose; but a large number of the modern suburban homes are now planned with a special dining room porch opening off the interior dining room, where an out-of-door meal may be enjoyed during fine weather.

Lease Law Change.

Would Make It Easier to Finance Building Operations, Legislators Are Told.

Members of the Hennepin county delegation to the house and senate were asked lately by members of the Minneapolis Real Estate Board to support a bill that will make it easier to finance new buildings on long leaseholds of city property.

It was explained that under the present law, it is difficult to finance buildings on long leaseholds because men with money to lend do not like to take chances on mort-

Attractive Books on Architecture and the Home

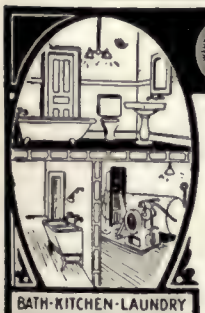
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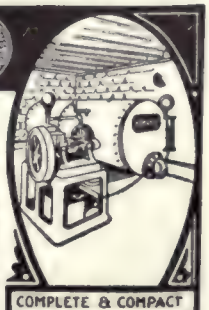
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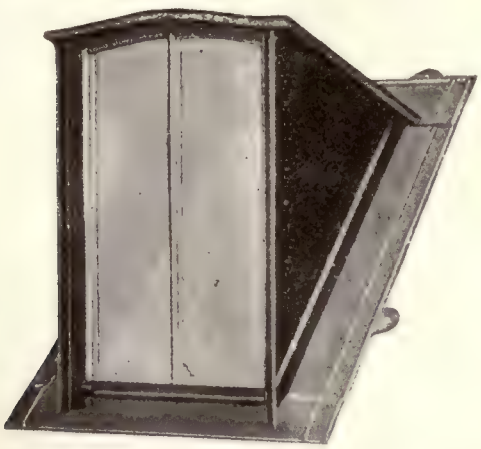
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gages of such property. Leases may be canceled in 30 days, and the mortgagee may be left in the lurch. The proposed bill is to create a receivership as soon as proceedings are taken to foreclose a mortgage, putting the mortgagee or a receiver named by the court in possession of the property, with provision for settlement with the mortgagor at the end of the year of redemption.

Fifteen per cent of Minneapolis down-town property is now held on long leases, and such a law would materially aid in improvement. The law would not apply except to platted property, as long leases are impossible on unplatted lands.

New Style of Dormer Casement Window.

For the special purpose of providing a cheap form of dormer window for workmen's houses and small cottages and which can be placed on a roof as easily as an ordinary skylight, a member of a firm of architects in Edinburgh, Scotland, has devised the construction which we illustrate herewith.



This window, it will be seen, gives the advantages of light and air of a skylight and the appearance of a dormer window at a comparatively small cost. The casement window is made of cast iron and is fixed in the same manner as a roof light, the slates or tiles going over the top and sides and under the bottom frame in such a way that any ordinary mechanic can put the window in place. There are two sizes, one measuring 16 in. by 25 in. and the other 32 in. by 25 in. and known as single and double dormer windows. They are fitted with casement sashes hinged at the sides and opening outwards with regulating quadrants and constitute strong, durable and water-tight dormer windows.

—*The Building Age.*

Cities of Refuge Built In Holland for the Belgians.

A new Belgian town in Gelderland has arisen in the last month.

The town is one of the cities of refuge for the Belgian fugitives that are being, or have been constructed in various parts of Holland, and this particular city is made ready for a population of 13,000. A large tract of heather grown soil has been fenced in with barbed wire and within this inclosure has been built a town of wooden buildings, a town in three parts, each separated from the others by long wide stretches of heather.

The wooden sheds have double walls to exclude cold, and are covered with plates of eternite (a kind of asbest-granito, impervious to the wet). Each building can shelter 250 persons who sleep in little rooms designed for five persons each. The buildings are heated by huge stoves.

Have Common Dining Room.

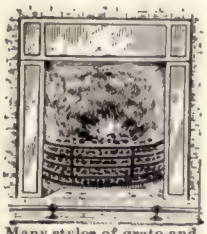
Meals are eaten in great common dining rooms for 1,000 persons each, with long tables and benches along side.

No separate cooking is allowed in the living and sleeping buildings, and no smoking, either—all for fear of a possible fire. The whole town is electrically lighted.

Character of Surroundings Affect Color Scheme.

Have an eye on the natural surroundings when deciding on the exterior color scheme of the house and remember that the color scheme should not be too assertive. An abundance of whites, grays, soft greens and browns of various shades will always harmonize with nature. Red needs an abundance of green as a background, and only the dullest of shades should be used.

In the case of brick, concrete, cement, and stone dwellings, the color scheme is in a sense automatic, being determined largely by the color of the materials selected. The frame house admits of greater variety of exterior color than any other material. In the shingle house the shingles



Many styles of grate and mantels to choose from.

This Grate Does Double Duty

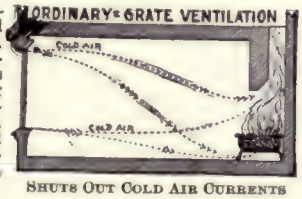
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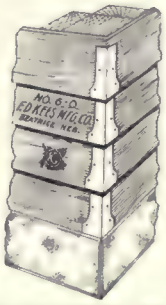
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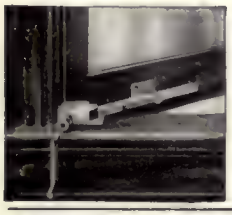
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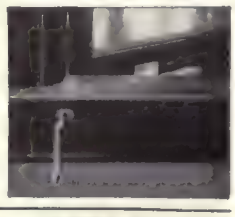
THE increased use of hinged windows swinging out has created a demand for some sort of a device that would enable anyone to open or close the window without opening the Fly-Screen, which of necessity must be on the inside.

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are stained or oiled. The clapboard house is painted.

A house which is set closely among trees should not be painted green or olive. Colors contrasting with the surroundings are better for the body of the house, but it may have green trimmings and roof if desired.

A house with shingled upper stories, as a rule, should be painted on the lower story a lighter shade than the shingles, which may be Indian red, dark brown, dark green, or some olive shade. The body should harmonize as, for instance, light or dark olive with Indian red, cream with browns, the grays with dark green or dull red. Pure white with green trimmings is one of the prettiest color schemes for a suburban house set against a green background.

A good color scheme for the colonial type of house is a warm buff with white trim.

A Time to Build.

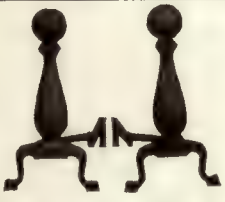
Manufacturers in all lines have had reason to know that building and equipment prices are exceedingly low. It is naturally expected that municipal and other public work will be undertaken under such conditions as have existed for months, and some trades have benefited from public contracts, but by no means to the extent needed for taking up the slack everywhere in evidence.

Leaving the war out of account, there has been in this country for many months a low scale of operations in scores of lines, consumption falling much below the average, while stocks everywhere have been reduced below what is called for by mere up-keep. The low prices of 1914 have only here and there been taken advantage of for the putting through of extensions by manufacturers in the metal working trades. Money is now to be had at reasonable rates. Contractors and manufacturers of material in every construction line are making the lowest prices in years, and people who have long been conserving their resources find in the present situation an opportunity that does not often come.

In view of the existing conditions it will be seen then that it is a very opportune time to build your new home. Materials are cheaper, good labor easy to get at low prices, and contractors ready to make bids accordingly. To sum up the whole thing in a line, your dollar will go farther now than it has in a long time.

Trees Add Value to City Property.

"If trees do have an effect on real estate, what is this effect?" says Frederick Noble Evans, landscape artist of Cleveland, Ohio. "It would be an assumption of the real estate man's total lack of observation to argue the point, that the effect of a well-grown tree, or tree group on a lot gives somehow a substantial appearance to the whole of the property. The sense of permanency attaching to the tree seems in our mind to spread to the house also. The household itself, our imagination suggests, must be founded on something substantial. That house a little further down the street, built in the same style, and just as large, with no tree on the lot, seems transcient of sudden growth and about to take sudden departure. Of the two, if we are prospective buyers, we would choose the property with the tree nearby, for we cannot but feel that life would be just a little more worth living here. I once heard a commercial traveler say that in choosing the house that he finally purchased, he had let his imagination do the deciding. He had merely shut his eyes and considered which one he would rather come home to. The property which he bought had trees on it. If one of us had been the broker, we would probably have felt indebted to the arboreal specimen for the sale."



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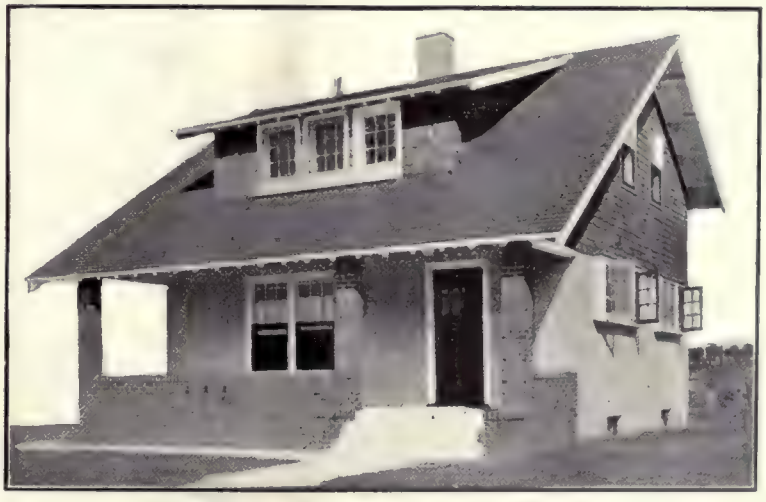
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New Booklets and Trade Notes

HOMEBUILDERS will be interested in a small booklet, "How to Build," recently issued by the Arkansas Soft Pine Bureau, setting forth the economical and practical points of Arkansas Soft Pine for house construction.

The Arkansas Soft Pine Bureau, whose office is now at 1738 Transportation Building, Chicago, will mail this booklet on request.

* * *

The way to efficiency and convenience in your garage is by installing a Universal Auto Turntable, according to the manufacturers, The Canton Foundry and Machine Co., Canton, Ohio. Their circular describes turntables in all sizes, from the largest, suitable for public garages, to the small size, for individual garages.

A post card to the manufacturers will bring full information.

* * *

Westinghouse electric ventilating outfits are fully described in a folder recently issued by the Westinghouse Electric and Manufacturing Co., East Pittsburgh, Pa. These ventilating outfits are adapted for use in places where the natural ventilation is inadequate, such as stores, workrooms, kitchens, lavatories, engine rooms, vaults and cellars.

If you are interested in these outfits, drop a card to the manufacturer.

* * *

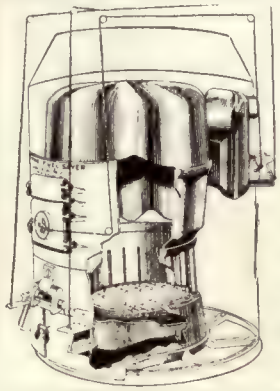
A booklet of exceptional beauty has reached us, describing the Curtis Portable Lamp, manufactured by the National X-Ray Reflector Co., 235 West Jackson Boulevard, Chicago, Ill. This lamp is something different in the lighting fixture line, and, in the words of the author, it is a "wonderful art lamp, which also evenly illuminates the entire room with a charming indirect light; beauty and utility are thus uniquely combined." The booklet also describes how the Curtis Eye Comfort adapters are used in producing other artistic lighting effects.

* * *

Stanley's Wrought Steel Garage Door Hardware, manufactured by The Stanley Works, New Britain, Conn., is illustrated and described in a circular issued by that company.

The articles featured are the cremone bolt, shutter fasts, foot bolts, chain bolts, ball-bearing hinges, door stays, "safety" hasps, door latch and door handle.

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A Boulder Bungalow.

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A Bachelor's Bungalow

Una Nixon Hopkins

Designed by R. F. Foss

WOMEN have a notion that they are the homemakers of the world, and, generally speaking, they are, but given a chance—an opportunity to put his mind to it—man will often accomplish wonders. And always a man-made establishment elicits a great deal of interest from the fair sex.

In Pasadena, Cal., there is a charming bungalow, which, as the man might say, in the phraseology of business, is herewith shown. In this no woman has had a hand; no woman was consulted relative to color schemes, furniture or hangings; from no feminine mind came a hint or a suggestion, yet the house is superlatively most successful.

Though moderate in size, considered as a whole, it is so planned that it is adequate for extensive entertaining—especially for dancing. The living room and dining room are combined in one, thereby gaining one delightful room forty feet long. A spacious porch, uncovered but for the pergola beams, runs across the front of the house. You enter practically the



The spacious porch, uncovered but for the pergola beams, is shaded by large eucalyptus trees.

center of the living room. The wide entrance door is made up of small panels of glass, wood mullioned, and is flanked by narrower doors of the same design. Exactly opposite on the other side of the big room these three doors are duplicated, opening onto a tile floored patio. The wall space of the main room is relieved by a wainscot some four and a half feet high, and the ceiling is broken by heavy beams running the short way of the room with flat mouldings the long way, dividing the ceiling into equal spaces. These same mouldings continue the perpendicular lines of the door and window casings upward and join the beams. Woodwork of redwood has a mahogany stain, dull finish, and the walls here are light tan, almost buff, making a very beautiful effect. The fireplace is of pressed brick, the brick extending across the end and around the corner of the room, interrupted by spaces for bookcases at either side, and to the right and left of them are seats. A large couch is drawn up in front of the fireplace with a writing table just back of it, giving a livable, usable appearance to this end of the room.



The Swimming Pool.

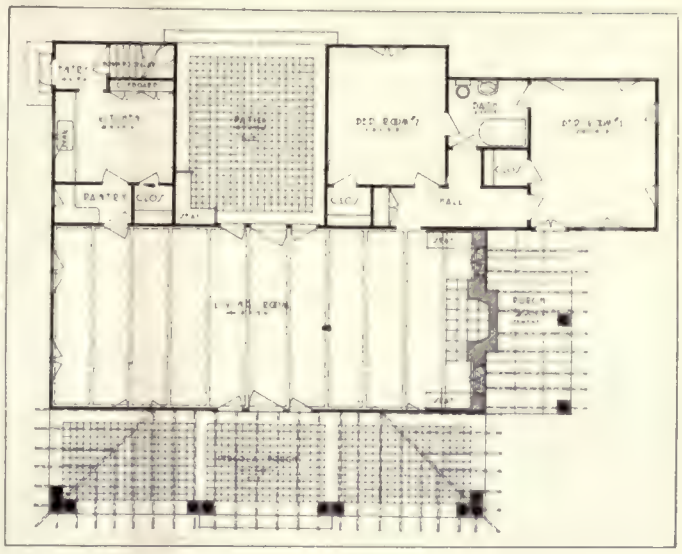


A corner of the garden.

A beautiful piece of bronze is the only ornament on the mantel. Dull greenish-blue velvet has been used to cover the couch, the cushions and pillows on the seats being of the same material. Several large chairs are upholstered in green leather so low in tone as to be practically neutral. And the mahogany table is covered in the center with a piece of blue and gold embroidery.

Especially pleasing is the end of the room devoted to dining. A simple sideboard with a mirror above it occupies the

space between the east windows, and on each side of the door going into the pass pantry are pretty serving tables. The dining table and chairs, like the other pieces of furniture, are of plain mahogany.



Silver in excellent design forms the chief decoration here, for there are no pictures in the room. A deep ecru net curtains the windows and heavy silk of the same blue tone as that used for the upholstery hangs at the side. On the floor there are exquisite Oriental rugs, in which the blue greatly predominates.

The owner's room is finished like the large room, in redwood, mahogany stained. This room is a combination of den and bedroom. To begin with, the room opens onto a screen-enclosed porch which is fitted with a couch and folding screen and used for sleeping in summer. In the bedroom there is a large mahogany folding couch bed and the writing desk is built in with book shelves above it. There are three exposures to the room



The combination living and dining room—Note the tasteful arrangement of furniture.

with the bath situated between this and the guest room.

The latter is daintily furnished in ecru and blue, the walls being entirely paneled in wood with a cretonne frieze in which blue and ecru prevail. Cretonne, like the frieze, constitutes the side hangings at the windows and the chest of drawers is cretonne covered with the dressing table, bed and chairs enameled like the wall. Light blue and ecru washable rugs cover the floor, and altogether the room is the most cozy and dainty imaginable.



The guest room, daintily furnished in ecru and blue.

Neither does the service part of the house show the lack of woman's hand in the equipment. Everything here is spotless—blue and white, including dishes and cooking utensils.

The real masterpiece of the place, however, is a swimming pool of large extent, reflecting the white columns of the pergolas which encompass it on three sides, the green pines planted close by, and the deep blue of the sky. Some day it will also reflect a bower of roses, for they are planted at the base of the columns and are already beginning to entwine them.

Away off in the distance among the pepper trees is a wee little house where the man and woman servant live, for following the only southern custom, no servants' quarters have been provided within the house.

Altogether the place within and without is characterized by charm and good taste.

What to Put in the Bungalow

H. P. Keith

SINCE the bungalow type of dwelling has become so universally popular, it is not strange that special attention has been given to its furnishing.

There is no denying that the large majority of bungalow homes are fitted out as to their furniture with whatever belongings their builders possess. With necessities of this nature, we are not now concerned, except, a little further on, to show how ugly and discordant and unrelated furnishings may become; as different as the ugly duckling that was turned into a swan—by the intervention of patient labor wisely directed—and a small expenditure.

But first we would like to remind our bungalow builders that in no other class of homes is there greater opportunity for success in furnishing if the law of fitness be faithfully observed; also the converse is equally true, that no other style of dwelling is so unhappy if this law is disregarded.

It is true that the term "bungalow" is applied to some very expensive dwellings, set amid very luxurious surroundings. But even these exotic bungalows should carry out a certain note of simplicity in their furnishings. They may be as refined, as carefully studied, as charming in every detail as it is possible to make them, but they must not be treated like a Fifth Avenue marble front, in respect to their furnishings. Priceless rugs, mirrors, oriental coverings, statuary, rich mahogany furniture — do not belong inside a bungalow, no matter what it has cost or how rich is its owner.

It is this use of mahogany in bungalow interiors that is perhaps one of the most frequent and most fatal mistakes. Polished mahogany surfaces do not "belong" with a bungalow, which is in its very essence an unpretentious dwelling.

Marie Antoinette, the queen of France, had too much taste to furnish the Petit Trianon—which was her substitute for the bungalow idea—in the prevailing luxurious mode, but used painted furniture throughout—nor has anything ever been more charming.

Our furniture makers are wide awake to this law of fitness in bungalow appointments, and the offerings of specially designed furniture are most attractive and satisfying.



If a rather substantial effect is preferred, there is oak in a kaizer grey finish, with a large library table at $29, an arm chair and a smaller straight chair with spring seats upholstered in a new shade of red leather at $13 and $10, respectively. Tapestry or furniture cretonne could be substituted for the red

leather if desired, and a very delightful bungalow living room could be achieved by employing a deep shade of wisteria-colored velvet on the chair seats and for the covering of a couch, these oak pieces being supplemented by a couple of wicker fireside chairs, the wicker stained grey and upholstered in a cretonne, having large lavender blossoms on a grey ground. With a background of grey grass cloth on the walls, and a grey stain used on the woodwork, such ivory would be most happy, though the grey-stained wood would be in harmony.

A most fetching offering for dining room furniture was one of the new English hand-painted sets of round table, arm chair and four straight chairs. The finish a deep ivory, the color of parchment, and the decorations charming bunches of old-fashioned flowers on the table top and the backs of the chairs. Old-fashioned madder-red blossoms were mixed with corn flowers and clover and the chair seats



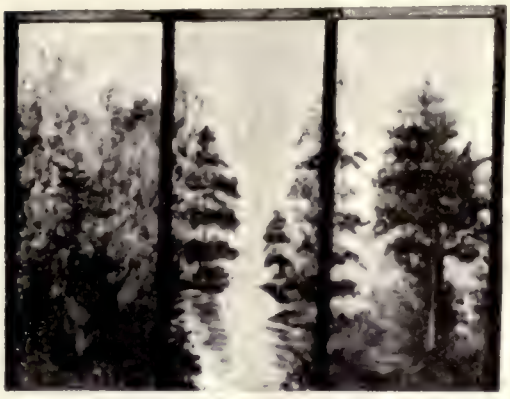
A pretty green and white bungalow in the California desert. The home of painted furniture.

furniture would be beautiful and appropriate in the handsomest of bungalows.

Or, if a lighter effect were preferred, all the furniture could be of the grey stained wicker, including the library table, the desk and the davenport. These wicker davenports are now very substantial pieces of furniture, and range in price from $30 to $50. They may have the seat cushioned only or both seat and back, and are thoroughly in harmony with the bungalow idea. A very substantial library table, fitted with drawer and magazine shelves, can be bought for $22. With such furniture, pine woodwork, painted deep were of rush, in a deeper ivory tone. It must be confessed that in the matter of cost, this cottage simplicity resembles the dressmaker's "little frocks" that look so simple and are so dear. For the price of the little round table is $87, the arm chair, $24, and the straight chairs, $18 each.

However, if one can paint flowers—as so many can—they can buy on the same floor a little dining room set, consisting of round table with simple square legs and cross-bar pieces, enameled in white for only $7 and rush-bottomed chairs with slat backs in the same finish for $2.25

each. Then if one goes over the set with a coat of deep ivory enamel and can put on the flower decorations in oil, with a coat of varnish to finish—they will have nearly the counterpart of the very exclusive imported pieces first described.



Pine tree design to be used on burlap.

It goes without saying that the woodwork to go with this furniture should be painted ivory enamel. The walls could be tinted either the pale green of the flower decorations, primrose, yellow or rose color—with rug to match, depending on the exposure of the room.

One of the prettiest dining rooms we ever saw had ivory white woodwork and soft, but deep, rose-colored walls. A round table with the square mission style of legs and cross-pieces and a dark brown mission stain was brought home from the second-hand shop, along with four or five straight, high-backed chairs, with old-fashioned rush seats. The dark brown stains required three coats of ivory paint with a finish of ivory enamel, the rush seats being painted a considerably deeper shade of ivory—about like vellum. There was a dresser with square spindle legs and that, too, was painted deep ivory, and had drawer handles of dull brass. On the dresser stood a pair of pink and white china candelabra, with a pink and white Dresden vase between them filled with deep pink stock. There was a faded Axminster rug which had been dyed a



Simple, painted furniture for the bungalow dining room.

deep crimson, and the curtains were of cream madras with an all-over design of pink peach blossoms. This is not a fancy picture, but a true story.

It is in fact wonderful what can be done with paint in furnishing a bungalow. There are those who think that all the discarded odds and ends of furniture which may have been accumulating for years will answer every need for the bungalow. The old golden oak dresser is mated to a shabby iron bed, much the worse for wear, a couple of heavy old dining chairs and a Brussels art square are added, and the bedroom is supposed to be equipped.



Rush seated chair with stencil design.

The owner probably writes to the decorating department of Keith's Magazine for a color scheme for the walls, and then wonders why the room is not "attractive."

It nearly always follows that this owner or at least the man in the case, would consider it a sacrilege to paint "nice oak furniture." But what wonders could be wrought even with these very unpromising materials, if they were brought into harmony with each other and the room, by a few coats of paint. The dingy oak dresser, which now is so out of tune with the white woodwork and dainty grey walls, if given two coats of white paint, followed by one of enamel and furnished with glass knobs for the drawers—would be transformed into something elegant, especially if a pair of Dresden china candlesticks were placed on the dresser top, each side of the mirror, as a crowning touch. Suppose, then, that the shabby iron bed received two coats of reddish lavender enamel, and that a wicker rocker, after being treated in the same way, is cushioned in a grey and reddish lavender cretonne, and that side hangings of the same cretonne are hung at the windows over the simplest of white voile or muslin curtains; also that a valance of the cretonne is used around the under part of the bed. Suppose that a shabby little old golden oak desk, such as nearly every family possesses, is painted white like the dresser; also one of the straight chairs in front of it. Suppose the old rug is sent to the dye house, the old color partly discharged and then dyed a dark shade of the reddish lavender. It doesn't take a very vivid imagination to see a beautiful room. Yet you have bought no new furniture; you have merely expended a few dollars



Wicker pieces for a bungalow living room.

for paint and quite a good deal of time and trouble. But isn't it a paying investment, for such a result, and has the paint hurt the old pieces of higgledy, piggledy furniture one bit?

Of course one would not care to furnish all the rooms, even of a bungalow, with painted furniture, but for the dining room and the chambers it is both appropriate and charming.

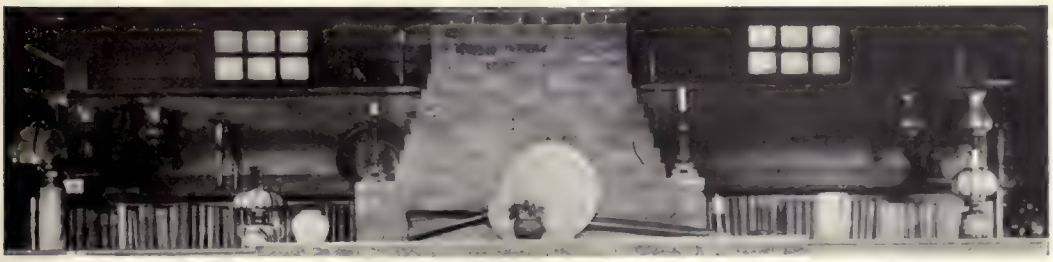
If one prefers paper to painted or tinted walls, there is now a great revival of "old-fashioned" effects in paper, and the dainty flowered stripes and quaint little nosegays of Colonial days make most delightful backgrounds for bungalow bedrooms.

There is still another type of bungalow where the rustic quality is emphasized. Such bungalows usually have only ceiled or battened walls, without plaster, and require a different style of furnishing. The growing fashion of building in the furniture to these bungalows is well adapted to them, and in harmony with the style of the dwelling. Usually these bungalows are built of undressed boards or shakes, stained brown with interior trim of yellow pine, on which one coat of dull stain is used. Not only are fireside seats or settees and window seats built in, but the bedroom dressers and dressing tables, the living room desk and, of course, the dining room cupboard and buffet. These are of the wood used in the trim and have the same finish. They are supplemented by some very simple chairs and tables to match, or by rustic wicker, stained a light brown.

In one such bungalow lately seen there was a battened wainscot six feet high in living and dining room, which were practically one room, the wide opening being furnished with a tall burlap screen framed in the brown pine. Above the wainscot there ran around the rooms a frieze of the natural burlap, on which was stencilled a dull bluish green, a design of pine trees, irregularly placed. The same design was supplied to the burlap screen and on the bottom of the burlap window hangings—in reduced size. Chinese blue and white toweling was laid across the dining table both ways, and formed the inner curtains.

The brown wood shelf of the cobble stone fireplace had for its chief ornament a great brown water jar of Mexican glazed pottery, and this held branches of glossy green foliage without flowers.

The rugs used were Navajo blankets, and such an environment is almost the only place where these rugs are happy. Even the bedrooms had outer hangings of the burlaps to run across the thin voile ones at night, as shades were dispensed with. The couches were upholstered in the burlaps, with the gayest of pillows heaped upon them for color.



Building Bungalows Aloft

Monroe Wooley

THE first essential in building a bungalow is to get a suitable site. A bungalow built in a bog is like an observation tower sunk in a shaft. Modern man demands a bounteous amount of view these days along with his sleep and his meals. With these ideas in mind a San Diego builder has resorted to a novel scheme in architecture. He has built his bungalow on the roof of a modest skyscraper — at the top of an apartment house. This bungalow has many of the advantages offered by suburban residence, including view and freedom from certain city nuisances, yet its occupants are near the markets, the shops and the places of amusement.



Bungalow home on the roof of a San Diego apartment.

So taken with this peculiar home was a citizen of the town that he forthwith offered to rent it, and it has been leased for a period of twenty-four years. The San Diego bungalow is located on the top of the Golden View apartments, a building that is, in itself, a thoroughly modern and comfortable home of the kind.

The apartment house is built of reinforced concrete, and the same material is used in the construction of the bungalow which rests on the roof, or where the roof ought to be. The bungalow portion is not visible from the street below, for the reason that the walls of the bungalow come up flush from the walls of the apartment. But to one who goes to the top of the building the bungalow home is at once conspicuous.

The house contains ten rooms. For a bungalow it is no toy affair. Made smaller it might have been located in the center of the roof and left with a lawn on all four sides. But for reasons of his own the builder chose to have his "yard" in patio form in the middle of the apartment roof. The garden, or "yard," is on the east side of the building roof. Here also a concrete court has been built for amusement purposes. About this court sun parlors, built to revolve for the pleasure of those feasting on the wonderful view the altitude and location affords, are situated. These parlors are so built that they may be rotated toward the sun, or they may be moved so they will be converted into just the reverse thing from a sun room, thus becoming shade rooms.

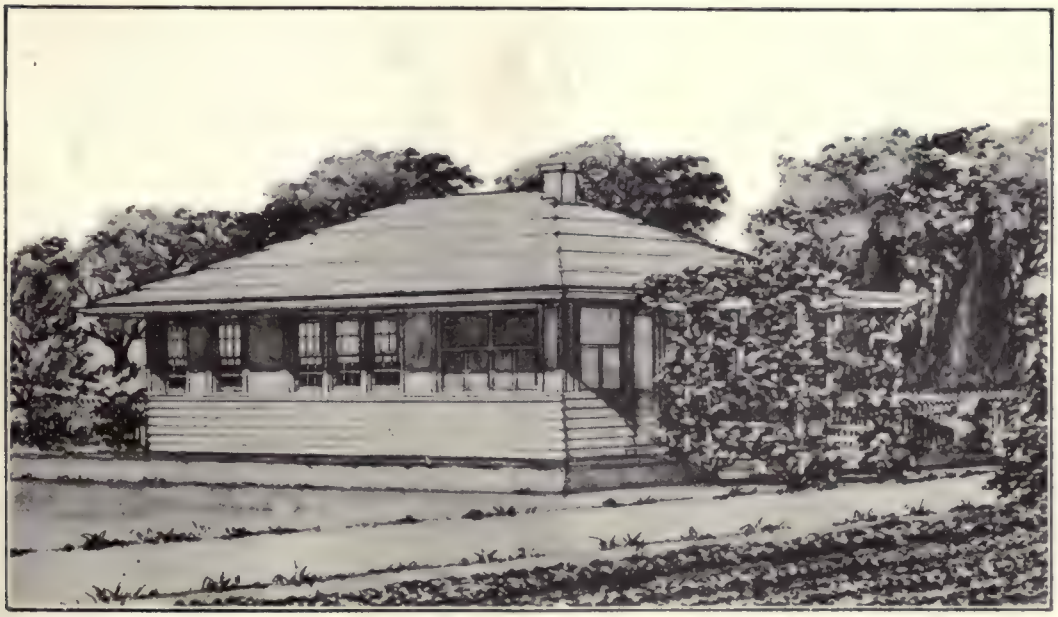
Thus the owner of downtown business blocks who detests trolley trips and wishes to be in the heart of the city, close to his business, but well away from the dirt and noise of the streets, may have his bungalow aloft.

Government Free Architectural Service for the Farmer

THE Department of Agriculture has just made public the first of a series of plans for farmhouses to be prepared by its specialists with a view to enabling farmers to construct inexpensive and better homes. The basis of the inquiry is the belief that the farmhouse is the most important building on the farm, and money judiciously expended in its planning and construction is well invested. The objects sought in the plans are to provide structures reasonable in cost and of good material, and so arranged as to give the maximum in health, comfort, and happiness to the family, and added convenience to the housewife in her domestic operations.

The plans made public are for the construction of an inexpensive farm tenant house, although the house as planned contains many valuable suggestions for owners with small families. The provision of proper tenant houses on farms, it is believed, is of increasing importance to farm management because of the increasing number of rented farms, the growing demand of tenants for modern houses, and a better understanding of the influences of the home upon farm labor and field efficiency. The cost of these houses commonly is inconsistent with the value of the farms, and the lack of improvements in them too often is in striking contrast with the outbuildings, farming machinery, and field equipment.

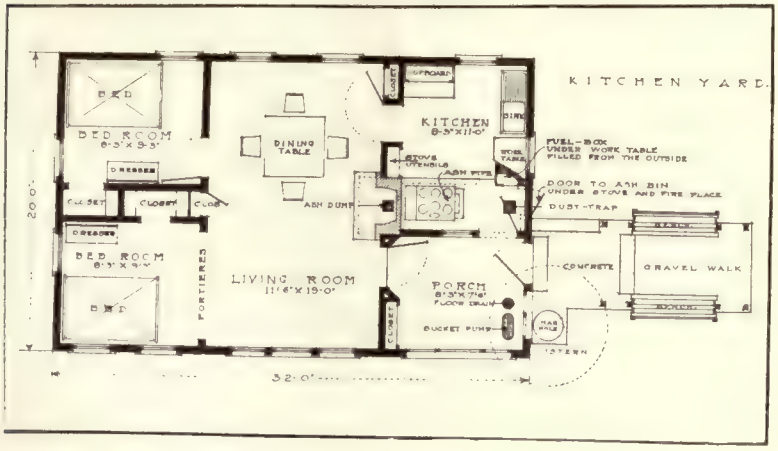
The important principles of planning, applicable to all buildings, which effect saving in construction and in the performance of indoor work have been carefully considered in these plans. Endeavor has been made to provide good lines and pleasing proportions which are



An inexpensive farm house.

essentials to genuine beauty in all structures, and are the production of skilful designing rather than of additional material and labor.

Special emphasis has been put upon providing a little home that will be conducive to the health of the family, provide for its social and domestic needs, and save unnecessary steps and operations on the part of the housekeeper.



The architects' studies seem to make it clear that many homes in towns as well as in the country could have been greatly improved and at the same time built at less expense if they had been studiously planned to meet the family needs, skillfully designed, and carefully constructed.

The tenant house, perspective drawing and plans of which are shown, is a simple, four-cornered structure, without bay windows, gables and dormers, or any projection save the cornice, which overhangs and protects the walls and window openings. The house is planned for the smallest dimensions and the most inexpensive arrangement consistent with the needs and the convenience of a small family. It has but one chimney and but one outside entrance.

The home has but one entrance which would be insufficient in a town house and it may be in this one; but another door can be gotten into the plan only by a sacrifice of wall and floor space which cannot be spared, or by increasing the size and cost of the house, which in connection with this problem cannot be done. If a door is substituted for one of the three windows in the south end of the living room the best part of the room will be ruined. Moving the entrance door to the south side of the porch would not only restrict the uses of the porch, but necessitate an outside door in the kitchen which, in turn, would necessitate a corresponding increase in the floor and wall space of the kitchen. If the door that opens from living room to porch were moved farther from the fireplace, valuable floor and wall space in both room and porch would be sacrificed.

These little details affect the size of rooms and of the building and, therefore, the cost. They are sometimes, and of necessity, influenced more by economy than by convenience; but by careful study they may often be made consistent with both.

Notwithstanding the simplicity and the playhouse appearance of the building suggested by the Department, it provides more usable space for the daily activities of the family than many larger houses. It is more convenient for a small family, more comfortable, healthful, and delightful than many farmhouses costing twice as much.

Why Bungalows Are So Popular

Warfield Webb

NO one who has given the topic any thoughtful consideration at all will deny that the bungalow is one of the most widely built types of houses of today. It has been the direct outgrowth of a keen desire to live the more simple life—to live more in the open, and to get away from the stuffy home life that for a time at least seemed likely to gain the ascendancy. However, as one widely known architect expressed it recently, it is a desire to get away from physical labor—in other words, because of its conveniences it has come to be known as the lazy type of home. Of course this is a facetious aspect, though its underlying truth in reality be admitted. Not so much a lazy type, as one that has come to meet the present-day demands of the housewife who is many times compelled to do her own work.

This idea is the one that best expresses the term, when applied to the bungalow. It is a direct outgrowth of the modern apartment or flat building, in a large number of sections. In this way many housekeepers have become educated to the advantages of living in an abode that has but the single floor for every requirement. In a word, the apartment, while not a forerunner of the bungalow, at least has been one of the largely contributing causes for its increased popularity in many localities where it might not otherwise have become so general. Its very charm lies in its compactness, its arrangement, and its homelike attributes for coziness.



Typical Bengal "Bangla" or Native Hut

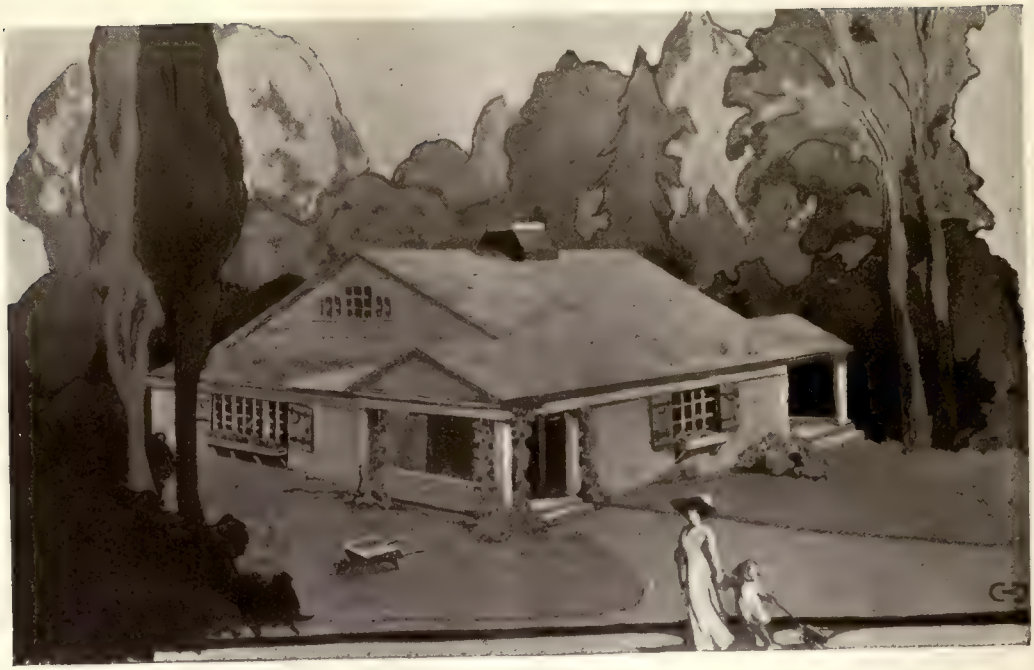


Planter's Bungalow—India in the Early Days



Englishman's Bungalow in India—Early Form

If we were to attempt a history of the bungalow it would be necessary to go to the far-away clime of East India, where the idea and name originated with the natives' hut of grass and bamboo, called the "Bangla," which gradually assumed the more modern type of one-story home. Even our cabins, as built several hundred years ago, might be termed bungalows, insofar as the type is concerned, for they are in several important details identical with the more re-



A thousand dollar bungalow built entirely of cypress. This is a close approach to the true bungalow type.

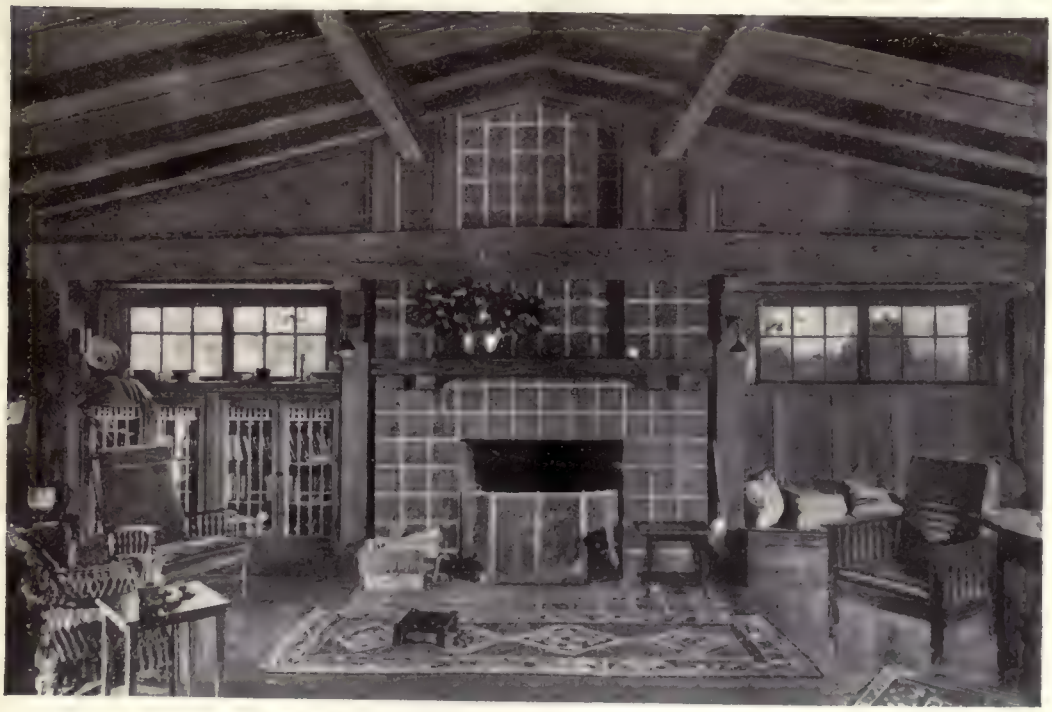
cently adopted style of this house. Of course to some people any cottage might be so called, but this is not correct. There are also a large number of so-called bungalows that are architecturally incorrect, and that still sail under the term bungalow.

There is a tangible reason why this type of home has become so universally popular with all classes of home people. Despite the increasing number of people who have come to the cities in the past generation, and notwithstanding the increased number of apartments erected in our cities and even in our towns, there has been an ever-increasing desire to get back to the single or detached house as a haven. Much as we love modern conveniences and labor-saving devices, and comforts, we still, as a people, love the home above all else. As this term implies so many soul-stirring desires, it keeps alive the great love, and the determination to possess a home, even though it is but a modest affair.

For this reason, added to the others that have made it a general favorite, the bungalow has and will continue to be a greater and more generally used type of house in the future. But there are other reasons also, and one of these pertains to the possibilities that the bungalow type offers for modest outlay or elaboration. The designs are many, and the types myriad in their complexity. The living room, for instance, has a certain charm that abounds with cheeriness, and that has been one of the strongest factors in creating a greater love for the bungalow. Properly viewed, the living room is the main feature of the bungalow. Around it is built the other apartments that are as a complement to this apartment. The home in this way can be made the ideal that is not possible with the ordinary type of home. The bungalow, in a word, has made it possible to get away from this two-story hideous, barn-like house, that lacked all the essentials that

are so strong a feature with the ideal bungalow.

In the old days we had the cabin, the home of one or two rooms, with possibly a room upstairs, the same as we find in a large number of bungalows today. This, then, was, in a sense, the forerunner of the modern bungalow, and with the added conveniences, the newer type of materials, and the water and heat, the bath and gas ment building followed, and this, with its charm, and its appeal to the housewife as a solving of the vexatious question of help, made her crave the single home where these things might be enjoyed without the inconvenience of hiring servants. There was a desire to get away, and to still make possible the labor-saving devices that were so much the charm of the apartment.



Interior of a California redwood type of bungalow.

range; these have only embellished the home that was in those days the best that many could afford. After the cabin of logs, came the frame house of logs and clapboards, and the rough stone structure, and the brick that was commonplace, but more pretentious. We increased the number of rooms, added a story or two as the case demanded. But the matter of servant help came to be viewed as part of the well-regulated family, and the inconveniences of upstairs did not find its serious obstacles until then. The apart-

In the materials that are used for the building of bungalows lies another charm. The bungalow is adapted to any and every style of structural material that is used for home building. The specific kind is only a matter to be determined by the owner, and in keeping with the cost of the house itself. Wood, concrete, brick, stone—any kind of these or a combination of any—have been used with results entirely satisfactory and with effects more than promising. The cost of the bungalow is only determined by the owner, who

may erect one to cost from a thousand dollars, to one that costs many thousands of dollars, according to his individual tastes and desires.

As the most appropriate kind of material is wood for the construction of the bungalow, it being the material with which the true type is always built, there might be a word noted in this connection. We in America first came to know the bungalow in California. This



Patio type of bungalow, as erected in the Adirondacks.

became the popular type of home there, as the climate was particularly suited to this style of home. The patterns were brought from the East Indian shores, and somehow it seemed to fit in with the climate, and at once became very popular there. Lumber finds itself a very important adjunct in the construction of the ideal bungalow. Still there are many types of bungalows that are constructed with other materials. The bungalow lends itself to so many adaptations in the way of artistically perfected plans that this becomes a striking point in its favor, and some very pleasing results are obtained with only a nominal outlay and a little care in the planning.

If we use lumber there is the exterior chimney of stone, brick or boulders, with the foundation of either. If brick is used for building the house, the stone chimney is sometimes adopted. If stone, the boulder chimney and the foundation. Stucco can be used in conjunction with wood, brick or any other material. However, wood is the typically correct material where we adhere to strict plans in the bungalow type of home.

What is most to be sought after in the building of the bungalow might be summed up in two or three very important attributes. First, the house should be built of good materials, of whatever kind. The setting should be on a plot of ground so as to permit its having breathing space, we might term it, and lastly, that it be along artistic lines architecturally. The first of these pertains to the class of materials used. If it be of wood, use one of several kinds that are specially adapted to this class of construction. These include redwood, cypress, white pine, gum, poplar and other kinds. If brick, use only the best of face brick. Common brick is not adapted to bungalow construction. If stucco is used, have only the best of both metal lath and Portland cement.

Some builders make the error of seeking to get low-cost material and then hope to obtain a first-class home. It must be borne in mind that the quality of the material has much to do with the quality of the bungalow. The best wood construction will insure this, and it is a topic that should be kept well in mind. Then, too, if the house lacks an artistic setting, there will be a decided decrease in its value and popularity. Some people make the serious



Summer bungalow residence, built in Madison, Wisconsin.

error of utilizing a small lot upon which to erect this type of house. The lot should never be less than fifty feet front, but a much larger space would be found far more profitable and satisfactory. Have the bungalow an artistic one. This can be realized with several kinds of good material where the plans are made with some degree of art. The ideal bungalow is the home with the most home-like setting.

There are many kinds and types of bungalows. Those that are built in the far west, where the climate is warm, are not suited to the sections where the winters are long and severe, and the atmosphere damp. The California redwood type originated there, but each section has its own peculiar type, and the origin of styles, we have cited above. Strictly speaking, the bungalow is not new. However, in the past ten or fifteen years it has become extremely popular with many people, and it will continue to do so as the development of the idea gains prominence. It is the ideal home, and its charms are best realized by those who have come to see in it the convenient, compact and cozy home for the man of small or large means.

For some unknown reason, the bungalow has not as yet become very popular with the farmer, which doubtless is due to the fact that he is usually slow in adopting a radical change. The bungalow should, and no doubt will, appeal to him as an ideal home when its real charm and its artistic side is made plain to him, and think it but a matter of time before the country bungalow, with its many vantage points for the farmer's wife, will meet with general favor.

"The American Bungalow and Its Significance"

Evelyn M. Watson

"A MERE FAD" someone remarked referring to a road of bungalows in the suburbs of Buffalo. Alas, are bungalows a fad; are there any real fads in the building world when it somes to the fundamental line of construction? There may be fads in wall decorations and freak sporadic movements in exterior trims but can the introduction of any new type of building be regarded a fad? The writer feels not.

A new type of building may be the fashion for a time and then leave the limelight for another style but the very durability and inelasticity of the materials used preclude the use of the word fad. Once a construction is developed and introduced it stamps its mark on the entire history of architecture and claims its place—be it small or large. There may be fads in wall paper patterns and in druggets, in color schemes and interior treatments, but even these are more like fashions that either repeat what has gone before or represent on their own responsibility a new type. In the construction of buildings definite types are more or less represented and more than in many other fields of self expression the whims of an individual or of a period are subordinated to broader ideals of the public as expressed in its architecture (as all ideals of each age are always expansed in architecture).

Types of constructions, distinct enough to be called such, are the result of development and are not the result of a passing fancy. They may appeal to fancy but their cause is deeper. Take the bungalow for instance, it first grew up in India—it reflects the same temperament as is found wherever there is a bungalow type building—Japan, China and the parts of the world where climatic or financial conditions dictate simplicity.

The bungalow of the West represents the conception of a movement which is broad sweeping. The Western bungalow with the tent roof and occasional pergola extension combines a touch of the Japanese and a touch of the Spanish Mission Architecture with this modern type of construction, and a bungalow is a type of construction.

The bungalow meets the demands of our people. It is not only a development in architecture due to the foreign influence but it is a spontaneous development answering the demand of the average man and woman for a modest priced convenient home. The bungalow comes at a period when home building and owning is the object of definite promotion not only among the manufacturers of constructing materials but among those who get the drift of our social awakening.

The bungalow has a mission to fulfill and it belongs to a period in our architectural development that is American, democratic and wholesomely progressive.

The bungalow is American as we have it here; it combines colonial simplicity with American craftsman detail which, as we know, is at once homelike and dignified, yet simple. The bungalow as we know it is a movement sweeping from coast to coast, stamping our architecture with an adaptability and adjustment to conditions that is as ingenious as the American himself.

The bungalow is democratic. It is suited as the basis for elegant and elaborate homes. It is adapted to homes elegant in their strict simplicity. It is suited to the modest dwelling, and with no discredit to it, it is suited to the most modest type of construction—the temporary house and the summer house and farm cottage.

The bungalow is wholesome with its many windows and in its demand for green setting it implies out-of-door life. It implies simple living and neighborliness. It suggests the close to nature movement from its vine hung porches to its outdoor sleeping rooms, from its pergolas running gardenward. The bungalow is progressive, adjusting itself to the needs of people in all circumstances. It seems to speak for the future of American democracy, for a time when the poor man will not have to feel that his neighbor's place is different from his little cottage—for a time when the houses of the rich will be recognized to have the same fundamental lines as the homes of the poor—just as rich men are now being recognized as being constructed as individuals along the same lines as their less favored brothers. As the time grows closer and the likeness of all men is more recognized in our national and industrial conduct it is logical that architecture should reflect this condition and so far it is doing so in the bungalow.

> *"The knowledge that age improves architecture as well as wine is not new, but the realization that the improvement is due to the texture of the surfaces and the softening of the rigid lines is recent and has not yet by any means become general."*
>
> *—Extract from Aymar Embury's "One Hundred Country Homes."*

The bungalow is not a fad, it is a part of a movement. Like all movements it will have its day but like all worthy movements in architecture it will not pass out—it cannot. Just as we have Queen Anne houses, or houses with only Queen Anne windows, just as we have colonial public buildings with colonial facades, so we will continue to have bungalows—or bungalow roofs, porches and windows and the bungalow treatment.

For a few favored persons who can see their way free to a half dozen residences, bungalows may be a fad, just as top boots may be a fad and wicker furniture may be a fad, but for the rank and file top boots will have their place with certain people and wicker furniture will have its perennial charm in season, and bungalows will remain a special type of construction adapted or adaptable for a broad number of requirements. Fads? It's a discredit to our judgment that we'd follow mere whims in the building of our homes. Perhaps we may pursue a delightful vagary in the decoration of them — but in the fundamental lines — no. We are not faddists of heart, we are anxious and in building our homes we haven't enough money to be (if we did we would no doubt follow more elaborate types). We are a "conservatively progressive" people and the bungalow represents our relations to the world and our present accomplishment in the underlying movement for establishing better homes and houses.

Freaks of construction born of an unwholesome period of time die—these are fads: the bungalow is no freak—it is a natural development and as such has an enviable place in the history and trend of American architecture.

Once again the bungalow is an exponent of modern life. The bungalow calls for all our latest improvements partic-

ularly the devices that make for the saving of time, space and labor. The electric iron, the electric toaster, the built-in book rack, the vanishing bed, the folding partition, built-in drawers of cabinets, likewise the bungalow calls for all our most attractive interior decorations, dainty chintzes, reed rockers, tapestry, brick fireplaces, wall board walls and diamond paned casements calling for latest improvements and most modern decorations flanked by sun parlors and sleeping verandas, porches and pergolas, the bungalow is indeed an exponent of modern life.

One feature in particular is offered by the bungalow—it embodies the craftsman style of architecture and the craftsman type of architecture is distinctly modern and distinctly American. The bungalow also permits the use of modern construction and decorative materials—tapestry brick, washable wall paints, stenciled; and metal shingles and lath and wall boards.

A more practical building than the bungalow cannot be conceived—it combines the beauty and simplicity of the cottage with the beauty and sublimity of the castle. It is a colossal little house where the home spirit is given every freedom and enjoyment. It is an efficient little house with the maximum of expense and face. It is a place where stern reality takes upon the air of romance and romance finds expression in reality. It is a very good type of home, friendly and kindly. Artistic, durable, practical, it is a modern house of dreams made real; bungalows are castles in Spain brought to earth in a way that either country families or the city householders can enjoy them so that every man has a chance for living the life that claims all of the home life. Whatever the criticism that might be made of the bungalow, this much is certain—this little house marks an epoch of independence among American citizens who not only are encouraged to break loose from the shackles of their overlords—the renting agency, but are led to save and invest in property of their own and build for themselves. The bungalow is not a mirage in the desert; a dream palace never to be realized but a practical tested out product of modern civilization.

The critic of the bungalow is among its best advertisers for the simple reason that he may object to one feature in this type of architecture but he cannot object to all. He always has to acknowledge points of superiority and however he may object to certain features he is led to point out advantages and to make favorable comment whenever he criticizes. He has to acknowledge that the bungalow, with its restful lines, follows certain laws of harmony and the laws of harmony are unchanging—they outlast any passing fancy, fad or whim. Good taste is based upon laws of harmony and, therefore, the bungalow is at least in good taste. It may, it is true, be in unusual temporary demand, but this is more an argument that it is in good taste than that it is a fad. The bungalow is not a hobby of the public because it is profitable, and as an investment pays for itself, while hobbies are pursued for the mere love of them without regard for returns, and returns are something the average bungalow owner is interested in—desire for returns is an expression of ever protective instinct. It is not a hobby in the sense of its being promoted by architects and builders as such, for these men are not working for their health and whatever they build up must not only reflect their ability but do so in a permanent way. The bungalow is not a whim, a freak of architecture—this has already been brought out. It is not the result of passing fancies but is a natural outgrowth of over national spirit, democratic and wholesome.

Building the Bungalow Fire-Proof

E. I. Farrington

LOOKING from the window of my home in a suburban town I have seen the flames rising from one house after another, as half a dozen wooden dwellings have been destroyed by fire in the past few years. It is usually the case in small communities that but little of the taxpayer's money is expended for fire equipment; sometimes horses have to be obtained from livery stables before the horse carriage or steamer can be dispatched to the conflagration. It is in these communities, therefore, that there is most need of building with materials which are fireproof, and builders of bungalows are keeping this thought in mind more and more when they plan their new homes.

As used in a popular way the term fireproof does not mean that there is nothing inflammable about the structure to which it is applied, but that the walls, at least, and perhaps the roof, are so constructed that they will not burn.

Stone, brick, cement and terra cotta hollow tile are the materials used in the construction of fireproof bungalows. Stone is too expensive to be used in most sections, but it offers excellent possibilities, as may be judged by the accompanying illustration of a beautiful stone bungalow. This little home is most attractive, both inside and out. The permanent character of the material used reduces the upkeep expense to a very small amount and the substantial appearance of the bungalow is carried even to the interior, where a great stone fireplace, with



A New England stone bungalow.

the chinmney breast exposed, dominates the living room, even though partially secluded in an inglenook.

Brick bungalows with tiled or abestos roofs are attractive in appearance and are fire resisting, even though all the interior is made of wood. Metal lath is used on the inside of brick walls, although it is possible to plaster directly on the walls, if wooden strips are built into them. Furring and lathing is desirable, though, because it helps to create an air space which keeps the house dry, as well as cooler in summer and warmer in winter. Brick bungalows have so much to recommend them, that they deserve wider popularity than has come to them. When skillfully designed, they have much more character and individual charm than the ordinary frame or stucco bungalow, with the additional advantage of being more nearly fireproof and less susceptible to variations in temperature.



The fireplace inglenook in the stone bungalow.

While stone and brick have merits all their own, the most popular material for the construction of fireproof bungalows is terra cotta hollow tile, and in many ways it is the most adaptable and satisfactory. When plaster is laid on hollow tile, the walls become fireproof and the job is a permanent one. By using tile on the roof and making the floors of hollow tile covered with smooth cement, the danger of fire is practically eliminated for good and all.

Clay or mud has been used for centuries by the Indians of Mexico and of our own great West, in the construction of their simple houses, but these adobe structures, while proof against fire, disintegrate and return to mud if exposed to an abnormal downpour. Terra cotta hollow blocks are prepared in a manner which seems to leave no limits to their durability. They come in different sizes, 12x12 x8 being a common size for outside walls, while those used inside are most often three instead of eight inches thick. The tiles are laid on edge and the stucco is applied directly to them, both on the exterior and interior walls. Being grooved, the tiles hold the cement firmly and there is no occasion to use furring or lathing, as the air spaces make the walls perfectly dry. The work of laying the tiles is done rapidly. Of course this material is less flexible than wood, but the tiles can be chipped off like bricks to make odd sizes. Concrete slabs may be used over the windows and doors if they are wide.

The majority of hollow tile bungalows have wooden floor construction, but if

the house is to be really fireproof in anything like a literal sense the floors must be made of hollow tile, too, and the additional expense is not an item of serious moment. The necessary wires and pipes are laid on the tile, after which a cement coating is made to flow over the entire surface and may be rounded up at the sides if deemed desirable, to get rid of all square corners and so facilitate cleaning. Most people, however, prefer wooden floors, even if it is necessary to introduce a little wood; therefore strips are laid in the concrete, the finish boards being nailed to them. In order to provide for wooden trim on the walls, specially prepared metal plugs are driven into the joints between the tiles before the plaster is applied. The ceiling is formed by plastering directly on the hollow tile, in the same manner as on the walls.

The outside plastering should be done by an expert in order to get really satisfactory results. Stucco in a soft cream shade is very attractive, but it is depressing and most undesirable when it has the bluish tint often seen on suburban houses. Neither red tiles nor red slate combines harmoniously with cream colored stucco, and plastered bungalows with red roofs are fast becoming a feature of suburban communities all over the country, bringing in a note of life and animation which is most acceptable.

Some people, however, have a prejudice against stucco in any form or color and yet desire to use hollow tile because of its fireproof qualities and its other undoubted good points. On homes of this type the outside walls will be faced with a brick veneer. When finished, the bungalow has all the attractive features of a solid brick structure and retaining all the advantages associated with hollow tile. Such a house, with the proper inside construction and a tile or asbestos roof, is thoroughly fireproof.

In addition to reducing or eliminating fire risks and insurance charges, the difference in the price of a frame bungalow and one constructed of brick or hollow tile is more than equalized in a few years by the additional cost of upkeep. The increased first cost of a fireproof bungalow is soon forgotten, but the bills for painting and other repairs continue year after year and continually grow larger, when one owns a frame dwelling.

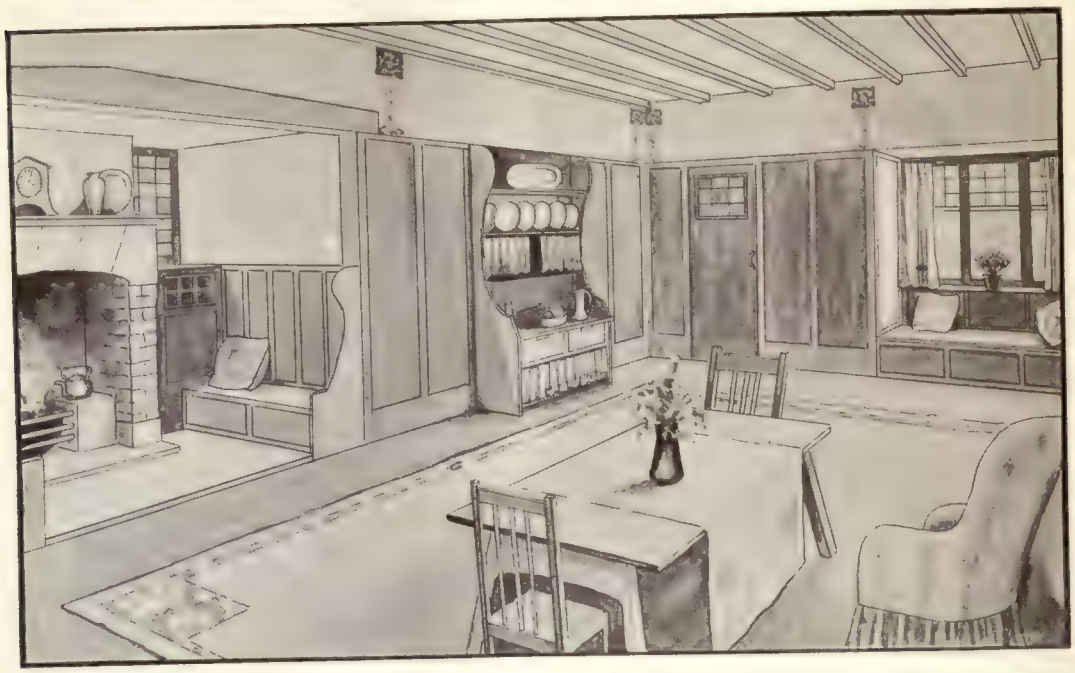
A Suggestion for the Summer Bungalow Living Room

Arthur E. Gleed

THE most important room in the summer bungalow is the living room, and as much space as possible should be devoted to it when laying out the plan. During the warm weather we can be satisfied with a tiny kitchen and even manage with small bedrooms, providing there is good ventilation, but in the room shared by all the occupants of the house, a feeling of space is absolutely necessary and a thing to be thankful for. This being true, and where it is not desirable to build upon a large plan, there are good reasons for combining sitting room and dining room in one large apartment and calling it the living room. This, in conjunction with a small kitchen and a handy pantry, should meet the requirements of the usual family.

The accompanying sketch is a sugges-

tion for such an arrangement which could be carried out to an artistic finish at a moderate expenditure. One of the principal features of the room is the deep window seat at one end of the room having a large cupboard at the side. This cupboard is fitted with a small outside window for light and ventilation and is arranged to serve as a pantry. Another item of interest is an inglenook with settle seats and book cupboards on either side of the fireplace. Over the book cupboards are leaded glass windows which give adequate light and make the side seats comfortable places for reading or work. A simple form of sideboard is built against the wall near the pantry, it being large enough to hold all the china in daily use and having two drawers for linen and cutlery.



A summer bungalow living room in tones of subdued green and deep ivory.

The decorative treatment of the room is such that if carried out in one of the cheaper woods, such as Georgia pine or cypress, it need not necessitate a large outlay, especially when we consider its durability and permanence. The walls are wood paneled to a height of about seven feet, and above that are either plastered or overlaid with plaster board. The ceiling has the beams left exposed, with the spaces between filled in by the same method as used for the upper walls. The open fireplace is built of brick and cement blocks, cement also being used for the hearth. A distinctive appearance is given to the inglenook by raising it about six inches from the main floor. This could be done by laying a cement floor or one of red brick, but if preferred, floor boards could be used with a finish to match the rest of the room.

A pleasing color scheme would be to stain all the woodwork a subdued green and tint the plaster deep ivory. The plain effect of the space above the paneling could be relieved with a stenciled floral motif, placed at each corner of the room and at points where the paneling was broken into by the ingle and the windows. Suitable coloring for the stenciling

would be dull green with a touch of Venetian red. The cement work of the fireplace should be tinted ivory, and with the brickwork left its natural shade, the whole will then harmonize with the other coloring of the room. The doors of the cupboards are fitted with glass panels, and copper latches are used as fastenings. Ivory tinted linen is used for the curtains, table cover, and cushions, the dull green and Venetian red being repeated on them by means of embroidery and stencil work.

Such a room, although distinctive in style, would be comfortable and desirable for every-day use. As a sitting room the ample space and absence of unnecessary ornament would make it restful and pleasant in summer, and the inglenook could be made a cheerful center on chilly evenings. As a dining room the arrangement of sideboard and pantry would be appreciated by those responsible for the meals, and if the color scheme was continued in the china used at the table, the simplest meal would be artistic. Where there is to be economy in building and housework is to be minimized, the combination of sitting room and dining room is well worth considering; and if a durable style of decoration is adopted the result should prove satisfactory from all points of view.

The Bungalow



"Among shrubbery and shade trees
The brisk little bungalow stands,
Its swinging white gate speaking welcome
While its dignified doorhook commands.

"Its windows so clear and so gleaming
Look out with suggestions of pride,
The walls neatly shingled and beaming
Speak well for the cosy inside.

"Here neighborly spirits shine clearly
And family life is implied
From the smoke of the brick-built dutch chimney
To the billowy curtains inside.

"Here's the home of American manhood
Independent and true in his life
With a welcome for friends and for neighbors
To share with his children and wife."





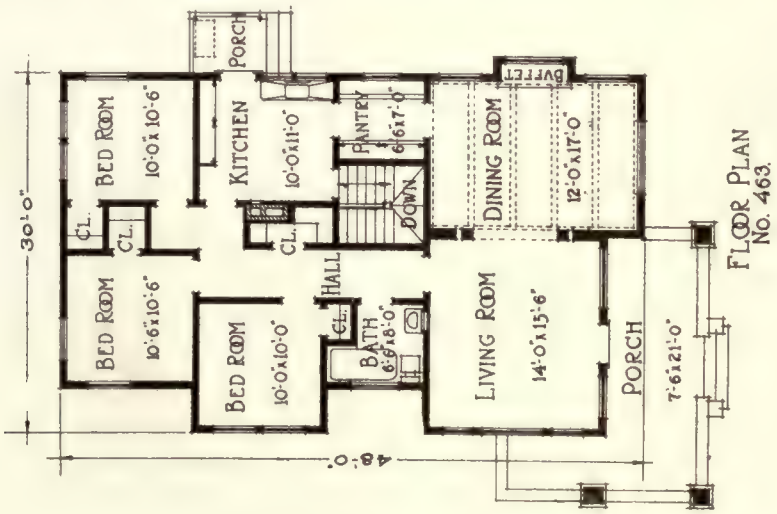
An open effect to the porch is gained by a single span between corner pillars.

A Group of Western Bungalows

By Jud Yoho

THE distinctive type of the western bungalow is quickly recognized. It has a freedom of execution, characteristic of the West, where one feels free of any necessity of crowding, and this very quality makes the bungalow the present popular residence.

In this group of western bungalows, the first design is especially suited for a corner lot. The arch extending between the corner pillars in a single span gives an open effect to the porch, and provides space for light, which is appreciated in the large living room. The dining room

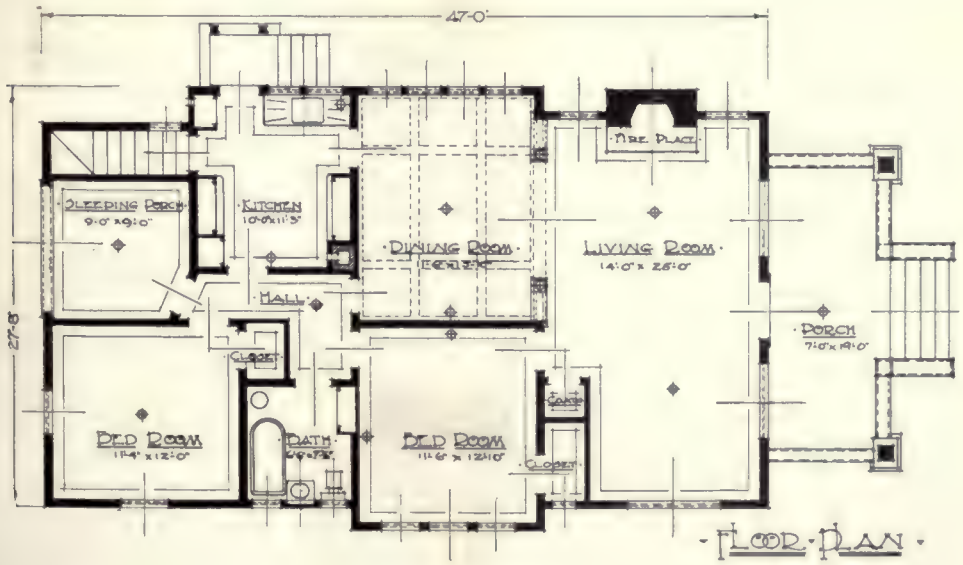




The surrounding grounds are beautifully adorned.

is second only to this spacious room in point of attractiveness and utility, being well lighted with windows on two sides. The kitchen is of good size and the pass entry is especially well fitted with cupboards. The small hall which enables one to reach the bath room from any of the three bedrooms or living room, without passing through the kitchen or dining room, is an important item.

The construction is frame with outside walls shingled and stained. Clinker brick of variegated shades is used for the porch wall, with a cement slab cap and trim



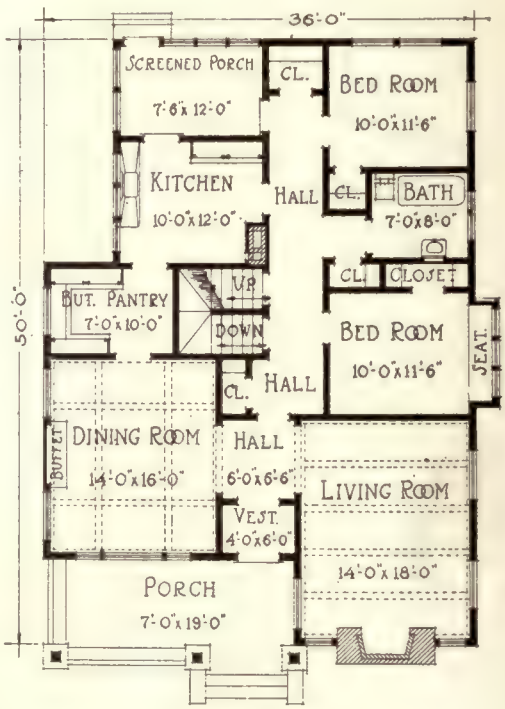


"Solid and Sensible."

around the corner piers. There is no second floor, but the low attic is well ventilated.

The next bungalow was built as a suburban home in the state of Washington and is of a more pretentious order, though quite simple of construction. The surrounding grounds are beautifully adorned with a big bed of daisies banking the foreground.

The color scheme for this bungalow, set among flowers, is gray. For the walls and for the roof, green. Another popular method of treating a wall and roof scheme such as this is the staining of the wall shingles a golden tan, while the roof may be any of the warm darker shades, preferably a brown tint. This golden tan is a stain that seems to relish the shingle. The white trim of this bungalow also enhances the effect, making for a complete harmony. To those who would criticise the golden tan stain as not being "home-like" in feeling, it should be pointed out that it does little more than give brilliance to the natural color or tint of the shingle itself, and is not an abnormal tint at all. If put on of the right depth, it is truly quiet in feeling. The interior devotes the front to a generous living room, fourteen feet wide by the house width. In the dining room the ceiling is beamed and the walls are wainscoted, with a wood panel running to a height of four feet. At the rear is a large sleeping porch. The exterior wall of the sleeping porch has casement sash, which can be thrown wide or partly opened, as required. This porch, it will be noted, has sufficient room for a bed and four feet to spare, and also that it is immediately adjoining the rear bedroom and can be reached directly from the front bedroom through the hall. The kitchen is of the



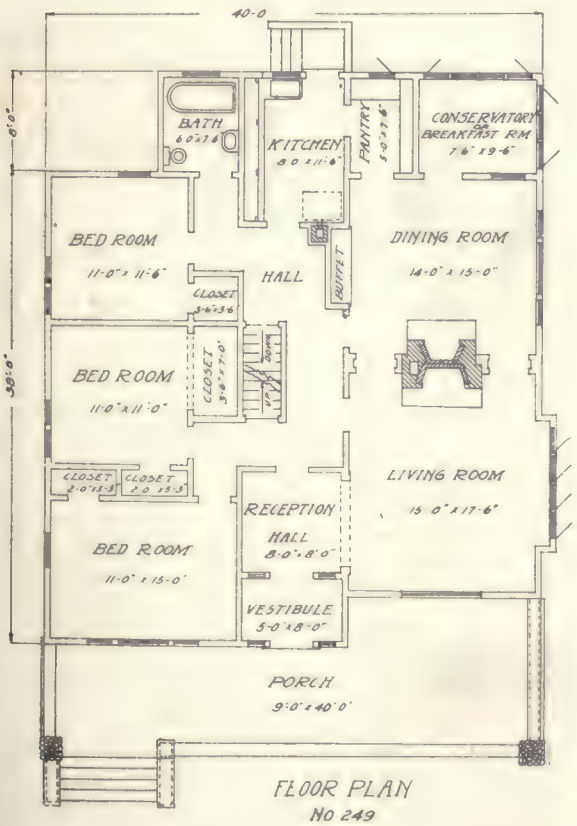
FLOOR PLAN
No. 457.

cabinet form, where everything used may be kept under cover and free from dust. This home is good to the eye and very well planned.

When one looks at the next bungalow in this group, it is hard to keep from getting enthusiastic about as pretty a bungalow as this, especially after an inspection of the house itself. "Solid and sensible" justly describes it. Where large room and closet space is needed, it would be hard to find a nicer plan. The entrance is into a vestibule which opens into a reception hall, with living and dining rooms on opposite sides. The porch floor is cement on dirt filling. The house is very well planned with all the rooms independent of each other, yet easy of access. The dining room has an exceptionally fine buffet. The living room is large and has a large open fireplace of a new design in pressed brick. The brick chimney with step effect is an architectural feature of the design and the union of roof lines producing a parallelogram in front. Our fourth bungalow is elaborate both as to the outside and inside design. This bungalow will attract the better class of house owners, not only by its pretentious appearance, but by the features of the interior, which include a cozy vestibule and reception hall, fireplace in both living room and dining rooms, a buffet in the last named room, and, best of all, a breakfast room, practically enclosed in glass, available to the kitchen with the same easy access as the dining room. The exterior employs cobblestones and brick with artistic effect.



Cobble-stone and brick used on front porch with artistic effect.



Planting the Bungalow

Wyman P. Harper, Landscape Architect

TO PLANT the bungalow effectively is easier than with the taller house. The latter stands too far above the ground so that a part of the object in planting is to reduce the appearance of height and so to make the house nestle more closely to the ground. This has already been done by the design of the bungalow itself, the planting coming to be for the purpose of ornament only.



For the bungalow, a somewhat lower planting is permissible.

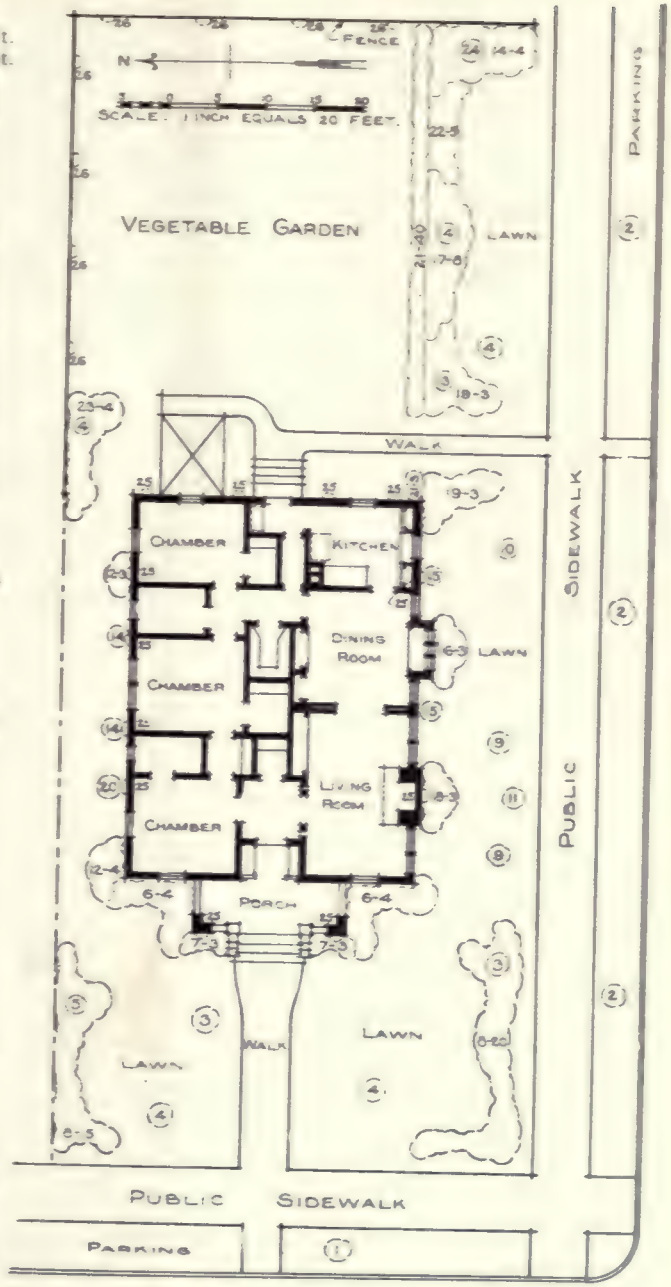
The method of planting about a bungalow is no different, however, than with a house. One plants the blank spaces and leaves the others open, and the choice of plants is no different, one being governed, first, by a plant's hardiness and, secondly, by its height. This was pointed out in the March number. As a rule, a somewhat lower planting is permissible but practically the difference in planting is trifling, while considerable in effect.

In planting for ornament, of course different seasons must be considered. Spring is the glorious flowering time for almost all the tree and shrubby groups, the only exceptions of consequence being the Hydrangea of our northern latitudes and the Rose of Sharon or Althaea of the middle states. If flowers are wanted at other seasons, then, excepting for the shrubs mentioned, the shrubbery would have to be supplemented by hardy and annual flowers. Both of my articles in February and March gave the method for a planting scheme of this kind, and other suggestions will be noticed more in detail in a later number.

There are other ways by which shrubbery can give ornament than by their flowers. Since the Spring is the only season in which flowers appear in abundance, some of the shrubbery must be selected because of its beauty in other particulars.

PLANTING LIST.

	No. Plts.	Ft. Apt.
1. American Elm (Ulmus Americana) or (St. Louis and south) Oriental Plane (Platanus orientalis)	1	
2. American Linden (Tilia Americana) or (St. Louis and south) Norway Maple (Acer platinoides)	3	
3. Ash (Fraxinus Americana) or (St. Louis and south) Sweet Gum (Liquidambar styraciflua)	2	
4. Mountain Ash (Sorbus Americana or S. aucuparia or S. quercifolia) or (St. Louis and south) Maiden Hair Tree (Ginkgo biloba)	5	
5. Buckeye (Aesculus glabra) or (St. Louis and south) Bechtel's Crab (Pyrus Bechtel)	1	
6. Bridal Wreath (Spiraea Van Houttei)	8	4
7. Japanese Barberry (Berberis Thunbergi) or (St. Louis and south) Dwarf Deutzia (Deutzia gracilis)	6	2
8. Japanese Rose (Rosa rugosa)	35	2
9. Siberian Pea (Caragana arborescens) or (St. Louis and south) Rose of Sharon (Hibiscus Syriacus)	2	
10. Mock Orange or Garland Syringa (Phildelphus coronarius)	1	
11. Tree Lilac (Syringa Japonica) or (St. Louis and south) Red Bud (Cercis Canadensis)	1	
12. Snowberry (Symphoricarpus racemosus)	7	3
13. Russian Olive (Eleagnus angustifolia)	1	
14. Siberian Dogwood (Cornus Siberica) or (St. Louis and south) Aralia (Aralia pentaphylla)	6	4
15. Weigela (Diervilla rosea)	2	3
16. Persian or Rouen Lilac (Syringa Persica or Chinensis)	3	4
17. Hydrangea (Hydrangea p. g.) or (St. Louis and south) Japanese Quince Cydonia Japonica)	8	3
18. Highbush Cranberry (Viburnum Opulus)	3	4
19. Common Snowball (Vibrunum Opulus sterilis) or (St. Louis and south) Japanese Snowball (Viburnum plicatum)	6	4
20. Hobble Bush (Viburnum Lantana) or (St. Louis and south) Common Barberry (Berberis vulgaris)	1	
21. Hedge Tartarian Honeysuckle (Lonicera Tatarica)	43	1
22. Hybrid Snow Garland (Spiraea arguta) or (St. Louis and south) Snow Garland (Spiraea Thunbergi)	5	2
23. Tartarian Honeysuckle (Lonicera Tatarica)	4	4
24. Mountain Ash (Sorbus Americana or S. aucuparia or S. quercifolia)	1	
25. Engelmann's Woodbine (Ampelopsis Engelmanni) or (St. Louis and south) Boston Ivy (Ampelopsis Veitchii)	12	
26. Bittersweet (Celastrus scandens) or (St. Louis and south) Wistaria (Wistaria Chinensis)	8	



Many shrubs fruit in an attractive manner. The fruit often comes late in the summer and continues far into the winter. It sometimes constitutes an even greater source of beauty than flowers. The little Japanese Barberry is notable in this respect, its berries appearing with as bright a color and with as great abundance as the flowers of other plants. So with the Highbush Cranberry, a tall hardy native bush with fruit as large and of the same color as the commercial trailing cranberry of the bogs. Again is it true with the Japanese Rose, the *Rosa rugosa*, whose large hips last late into the winter. So with the Mountain Ash, covered in the fall with clusters of minute apples the size of berries and highly appreciated by the birds. Much of the charm of the Bittersweet vine and the Woodbine comes from the same source.

The Woodbine especially is as famed for the Fall coloring of its leaves as many other shrubs are for the beauty of their flowers. The Oaks and Sugar Maple also are notable in this respect, with their shades of red; while the Bittersweet is brightly golden. The Fall color of many shrubs is bright but fading gradually to the brown of winter. The Japanese Rose retains its dark rich green to the last and in contrast is beautiful. This kind of leaf coloring is most interesting and quite different from that of the artificially developed varieties which I condemned in the March number.

A source of winter interest among shrubs is the color and grace of the branches. Leading in these are the Dogwoods with their bright reds and the Garland Syringa or Mock Orange with its golden yellow. The Bridal Wreath in winter is of a bright clear brown which, combined with the delicate texture of its twigs makes it a plant of high ornamental value at any time. The Caragana or Siberian Pea is of a bright green. One cannot omit from this list the evergreens which are by all means the most prominent in this respect, but because evergreens are not easy to plant and cultivate and because these planting lists are meant to include only the kinds which are both hardiest and best, the evergreens have been omitted from them until planting is more commonly understood, as it ought to be and will be.

ESTIMATE OF COST.

Cost of Plants.

6 large growing trees at $2	$12.00	
7 small growing trees at $1	7.00	
160 shrubs and vines at $0.25	40.00	
10 per cent additional for freight and packing charged extra	5.90	
		$64.90

Cost of Preparation of Soil.

(Omitting cost of extra black earth and clay if needed.)

1 man 1,600 sq. ft. plant beds 6 days at $2 per day	$12.00	
1 man planting trees and shrubbery 2 days at $2	4.00	
		16.00
		$80.90

The planting plan of this number, contemplates the inclusion of as many interesting kinds as is compatible with good effect, and in reality, for good effect, the fewer the better. People, however, like plants for their own sake, hence the necessity of using as many kinds as possible without spoiling the appearance. If the bungalow illustrated is built upon a fifty foot corner lot, the planting plan is specific enough so that one can prepare his ground and do his planting complete with the help of the cultural directions given in the February number.

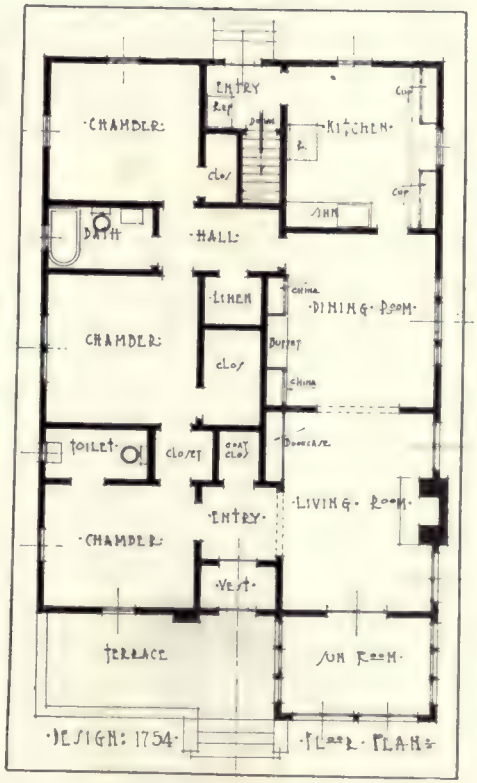


The treatment of the sun porch with flat roof and pergola beams is rather unique.

Three-Bedrooms-on-a-Side Bungalow

IN this bungalow design the details are simple. The treatment of a sun porch with a flat roof and pergola beams is rather unique; the addition of vines clinging to the cement and beams will add much to its charm. The floor plan places the living quarters on the south, with the bedrooms on the north, if this were built on a west front lot as originally planned.

The plan contains everything that could be asked for. The living room has built-in bookcases and fireplace; the dining room, buffet and china cupboards. The owner of this place will surely never complain for lack of closet room. Oftentimes badly needed closet space is sacrificed for the sake of large bedrooms. In this case, the bedrooms are all good sized, each provided with a large closet. In fact the closet space for the bedrooms totals about 17% of the bedroom space. This does not include a large coat closet and an extra large china closet.



The design does not provide for finishing off any rooms in the attic, but the roof is of sufficient height to

provide good ventilation during the summer, and is steep enough to freely carry off water from rain and melting snows. If desired one or two rooms with low ceilings could be finished off; a stairway provided over the basement stairs.

A full basement would furnish an abundance of space; laundry, dry and vegetable rooms, etc.

A suggested color scheme would be tan colored cement (rough cast) with white cement base, coarse, trowelled smooth. Shingles stained brown and roof green, the trim to be painted white.



Wide, rough-sawed drop siding, and rough-cast cement above are used for the exterior walls.

Bungalow for Father and Mother

A HOME planned for just two people, where every household convenience has been arranged to reduce steps—just the home for father and mother.

The exterior is very pleasing with its wide projecting cornice and its low sweeping roof, extended out over the front porch and amply supported at each side by massive cement piers. The exterior walls from grade to window sills are of wide rough-sawed drop siding, stained, and rough-cast white cement plaster above. Shingle or composition roofing is used.

The floor plan is ideal for such a home. The large room at the left is really a living room, with boulder fireplace and seats on each side. This room is convenient to kitchen and the intention is to use it as a dining room as well. In a home like this, why separate rooms? What a glorious room for entertaining. The long window seat and the fireplace seats help to provide ample seating capacity, as the furniture of this little home is rather limited.

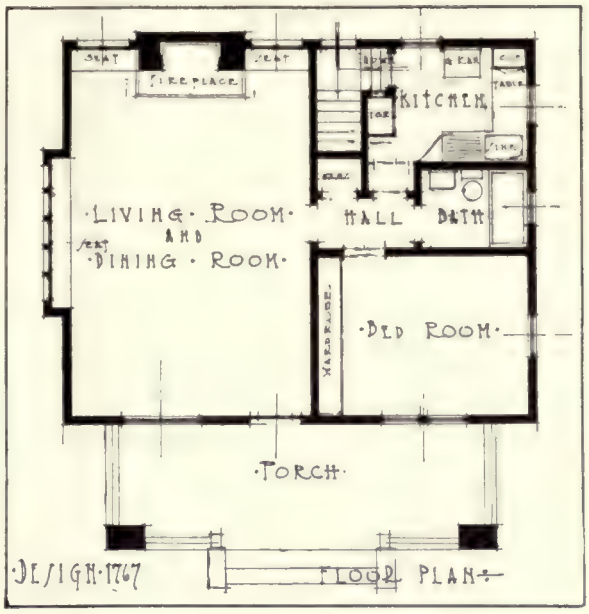
The owner has provided for a fair sized bedroom with a built-in wardrobe across the entire end. There is a convenient little

bath, the plumbing being arranged most economically.

A small kitchen or kitchenette completes the arrangement. Here, space has been provided for an ice-box, to be iced from the grade door entrance; a small gas range, kitchen cupboard, a built-in table. Note the extra large linen closet off the hall. Stairway leads to grade door or to basement, where the owner has installed a little hot water heating plant.

Good storage space. A laundry could be easily added if desired.

This would make an ideal little home for the "newlywed." The little bungalow, if finished in "true mission," plain square lines of the furniture, as well as the woodwork, predominating, is estimated could be built complete as described for from twenty-three to twenty-five hundred dollars.



A California Home

(Description and floor plan on following page)

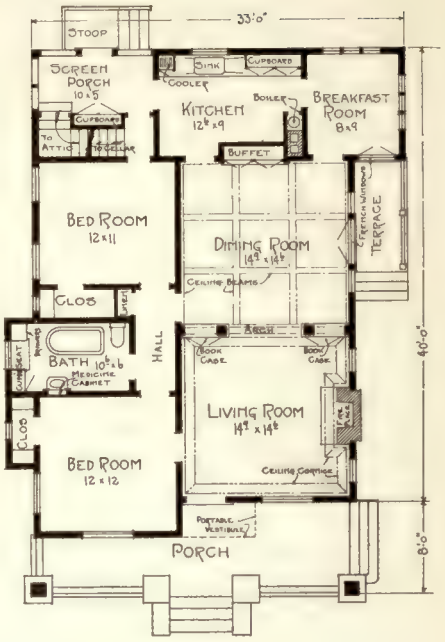


E. W. Stillwell, Architect.

The broad expanse of the front gables is carried by a heavy beam from cornice to coreice.

TURNING our attention to the California type of bungalow, we give a design by Mr. Stillwell, one of his latest and most attractive homes. A splendid picture of this home taken from a photograph after completion, shows what a beautiful residence this is with its well placed gables; the broad expanse of the front gables is carried by a heavy beam from cornice to cornice. The supports are built up half way of brick with cement stone caps. The porch steps and floor are also of cement.

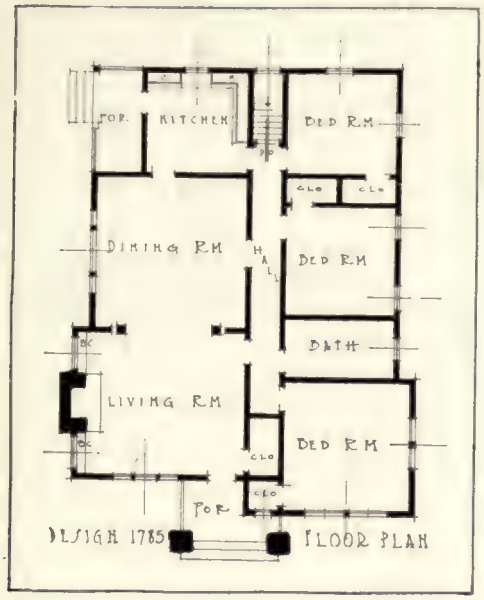
The interior has five principal rooms besides bath and enclosed kitchen porch and breakfast room. This latter could readily be converted into a sewing room or an emergency bed room. There are no rooms finished on the second floor but the attic at the ridge has a clearance of 7 ft. and a good maid's room could easily be partitioned off in the front.



A Rustic Bungalow Design



This bungalow rests upon a shallow foundation wall built of two courses of field stone.



A MODERATE use of cobblestone in the building of the bungalow may be made most effective. In this design has been secured a somewhat rustic effect by the use of cobblestones for the chimney and the porch supporting columns. The bungalow rests upon a shallow foundation wall built of two courses of field stone; no basement. The outside walls are sided with wide rough sawed boards to be stained and further emphasizing the rustic appearance of the design.

The interior is planned so as to secure the benefit of practically one large room by merely separating dining room from living room by wide columned opening. This is a simple little bungalow which will appeal to a great many desiring an inexpensive summer residence.

The Cobble-Stone Front Bungalow

MANY people are fond of the somewhat rustic effect, which may be added to a house, by using the field stone or cobble stone, in chimney, porch piers, etc. We illustrate an excellent example of this rustic and somewhat free hand architecture; a combination of rough frame work and stone. The portecochere may be omitted, if desired, without detracting from the artistic beauty of the house.

The exterior may be either weather-



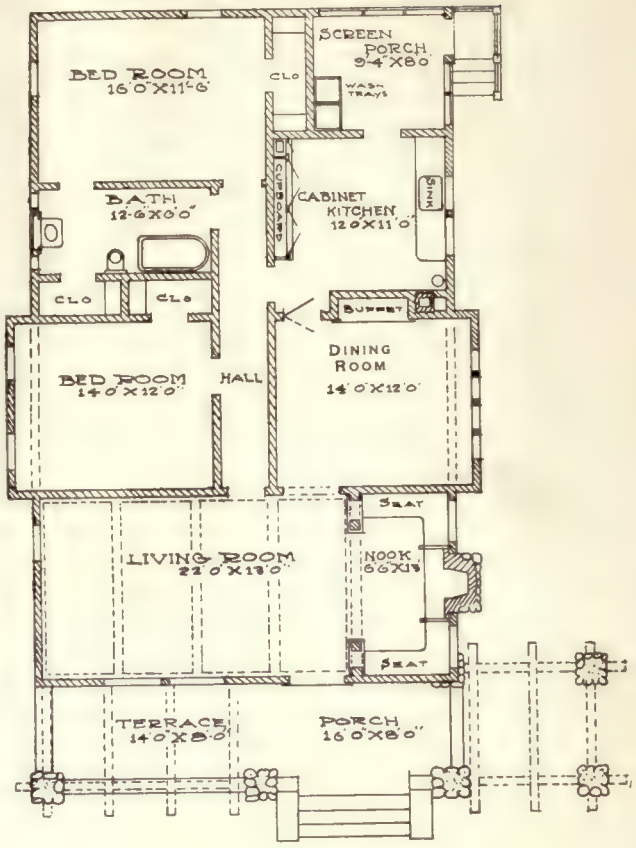
Bungalowcraft Co., Architects.

The roof, with good pitch, is well braced so that it will be secure under any amount of snow or rain.

boarded or shingled and the roof is of shingles with a good pitch and well braced so that it will be perfectly secure under any amount of snow or rain.

Inside we have a library with built-in bookcases and seats separated from the living room by a handsome buttressed opening. The rooms are all of good size and are cleverly arranged. One can get from any part of the house to any other part by two different routes — sometimes a much appreciated feature, especially when unexpected company arrives.

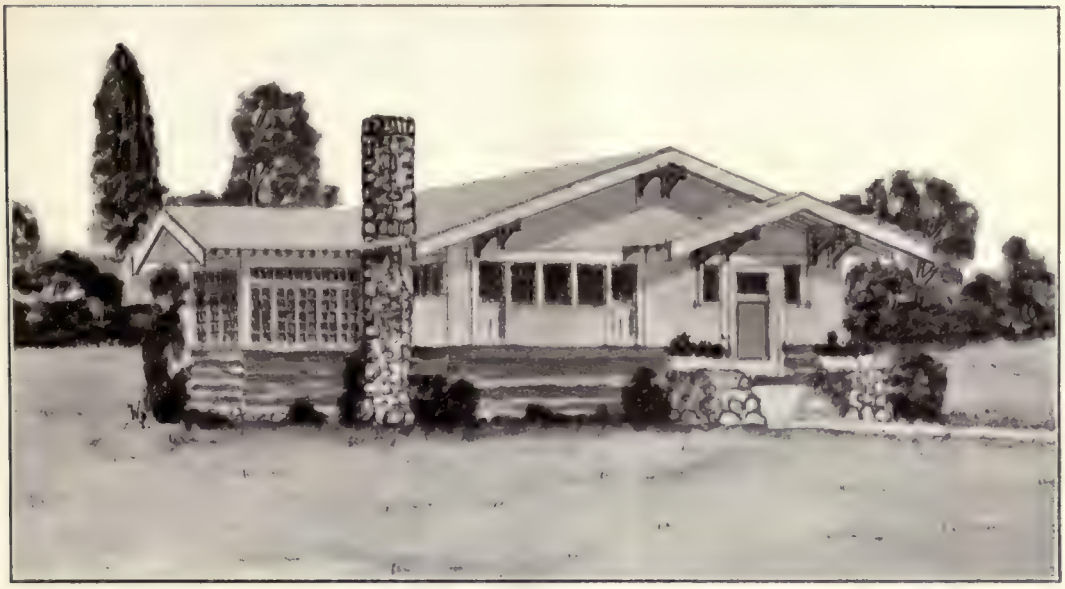
The living room has beamed ceilings and paneled wainscoting and the dining room has paneled wainscoting with plate rail. There is a handsome built-in buffet in the dining room and a large comfortable fireplace in the library end of the living room.



The abundance of windows will be valued when light and ventilation are considered and the large closets and buffet kitchen, with every built-in convenience, are features which will be recognized as most desirable, and which will be appreciated by the housewife.

A Real Bungalow

WE have considered many types of bungalows, semi-bungalows and bungalow cottages. In this design we have the pure bungalow type, a striking little home which should be constructed very economically. The wall lines are not broken by bays or projections, with one exception, that of the sun room. There is an outside chimney, making the exterior more attractive. The construction of the roof has been given special study in order to get the correct proportions and at the same time secure a practical roof, one that will stand the test of the Northern climate where there are frequent snow falls of anywhere up to 10 or 12 inches. A roof that is full of breaks, ridges and valleys, while exceedingly artistic and pleasing to the eye, can not be built economically and is not a practical

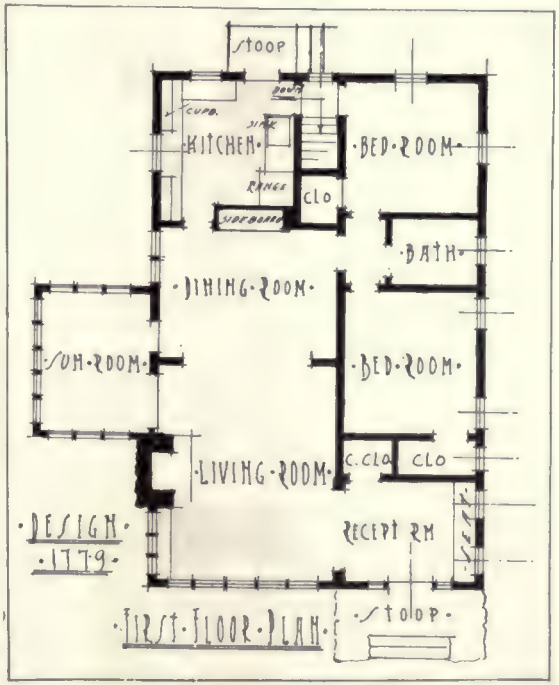


The outside chimney makes the exterior more attractive.

type of roof for the Northern climate where one encounters heavy snows. In this roof the heavy projection is supported by massive brackets.

Outside walls are finished in rough sawn siding carried from ground to the window sills. These are to be stained in brown and white cement plaster used above. Trim also in white. There is just a little cobblestone work to give the right touch and relieve the plainness. Flower boxes also rest on cobblestone buttresses which help in this respect.

The interior will bear close examination. The entrance is into a small reception hall which has a built-in seat across its end. There is also a coat closet and the hall has wide cased opening to living room. Here we have a large boulder fireplace with built-in bookcases on one side and a French door on the other which leads to a sun room. This sun room is so arranged as to serve two purposes. With a French door leading into the dining room, it can be used in summer as a breakfast porch or it may be used as a sun room. This would make a very attractive and practical residence for a family of three or four and would be an ideal home for the "newly weds" with room for entertaining.



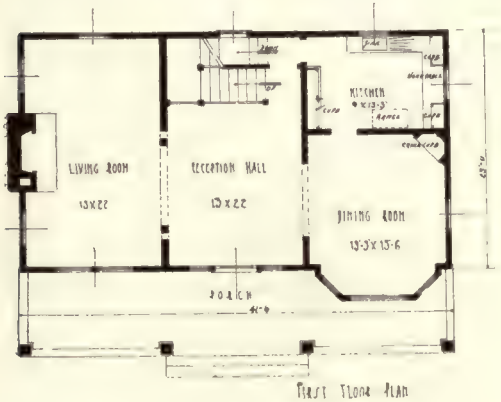
A California Bungalow with Long Sweeping Roof Lines

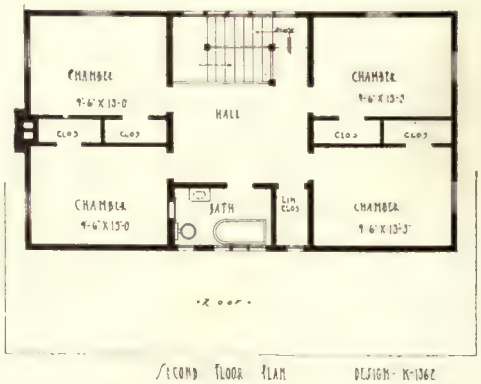


Large enough to serve the requirements of a good-sized family.

THIS bungalow with its extensive porch and large cobblestone chimney is one of the most attractive bungalows ever built in that land of sun and flowers. Furthermore, it serves all the requirements of a good-sized family, having besides the large reception hall extending clear through the house, a large living room, dining room, kitchen and four bed chambers. While the style of this home does not necessarily confine it to the southern district, it needs must have a generous attractive ground, beautifully planted for a setting to do it justice.

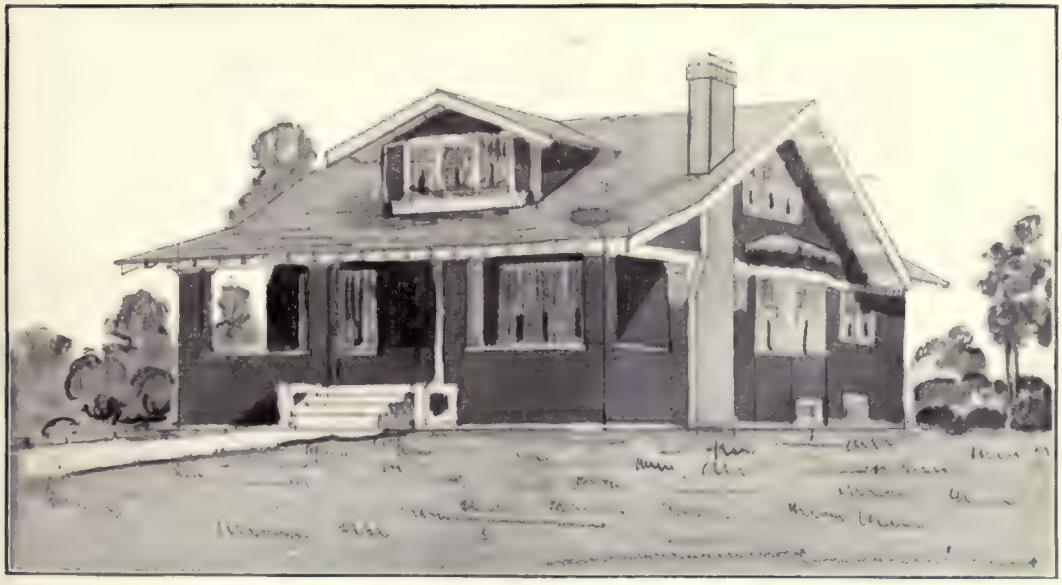
The plan is a very roomy one indeed. Look at the large hall, practically a part of the living room, making to all intents





and purposes one large room, 22 feet by 26. The fireplace inside is of brick. The dining room is of very pleasing proportions and large in size. The stairway is so designed and planned that it serves the purpose for both a front and back stair. The cellar stairs go down in under the main stairway, first three steps to a grade landing, on which is a door giving access to both cellar and kitchen. This is a convenient arrangement as it makes it unnecessary to build the usual outside bulkhead which is so unsightly and inconvenient. Where can one find as spacious a hall on the second floor as is shown in this design, so well lighted by a beautiful group of five leaded glass windows on the stairway?

An Eight-Room Bungalow



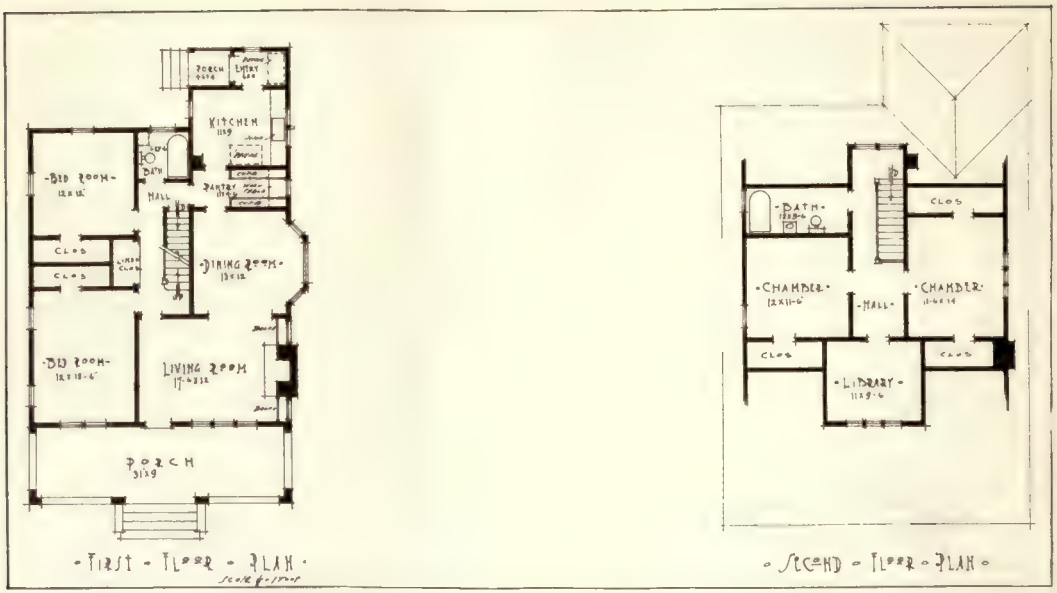
Rough-sawed drop siding has been used for exterior walls with shingles in the gables.

FROM the consideration of strictly California bungalows, we turn our attention to a design for a semi-bungalow or bungalow cottage with low sweeping roof lines and wide projecting dormers.

In the construction of this house, rough sawn drop siding has been used for the exterior walls with shingles in the gables, both to be stained. This is a very roomy plan, providing five bed rooms and two bath rooms. The kitchen and rear entry extend somewhat beyond the rear wall of the house proper as a one story L. There is a dividing pantry between kitchen and dining room and the bath is located most conveniently on this floor for the service of the two downstairs bed rooms. Another bath room is provided on second floor.

Living room is equipped with brick fireplace and built-in book cases. This home is planned for full basement and intended to use either furnace or hot water heat.

(Floor plan at top of following page)



A Bungalow Cottage

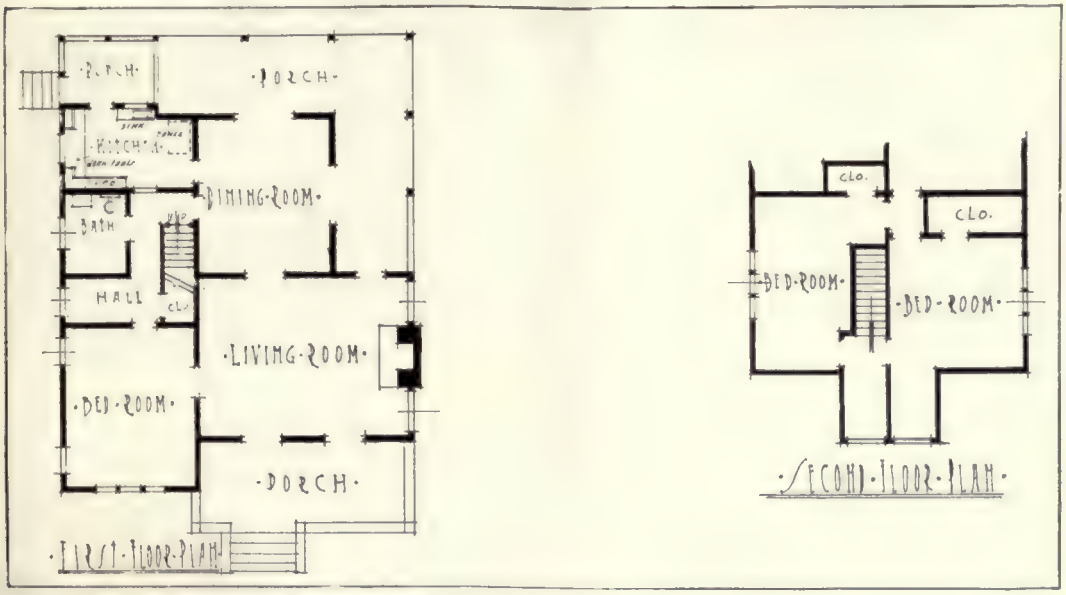


Ernest McConnell, Architect.

A bungalow with a touch of the Colonial.

A BUNGALOW with a touch of the Colonial and a combination of cement and shingles is presented in this study.

The living room is furnished with French door opening on to front porch and the same is true of the dining room on to the rear porch. You thereby get a vista from the front door clear through the house to a garden at the back. The inside finish is soft wood, left in the natural, and the interior detail very plain and simple for an inexpensive home, for a small family.



A Western Shingled Bungalow

ILLUSTRATED herewith is a western, shingled bungalow designed for a suburban home; the site being a corner plot two acres in extent, the broad side of the house being to the east and the living room to the north. It will thus be noticed that all the rooms, excepting the dining room and kitchen, have the east facing.

This bungalow is provided with full basement containing a hot air heating system and the usual fuel and vegetable rooms. The foundation is of concrete and the superstructure walls are of shingles with stucco panels in the gables. The porch walls are of concrete with reinforced concrete floor. The porch piers are of clinker brick as is also the outside face brick of the chimney.

The vestibule provides space for wardrobe and rubbers. The living room is designed with a fireplace of pressed brick and built-in bookcases. The dining room and living room are connected by a columned opening. The dining room is equipped with a built-in buffet, five-foot wainscot and plate rail. The windows of the dining room are small casement sash.

The owner's bedroom, on the first floor, is reached through a small hall from

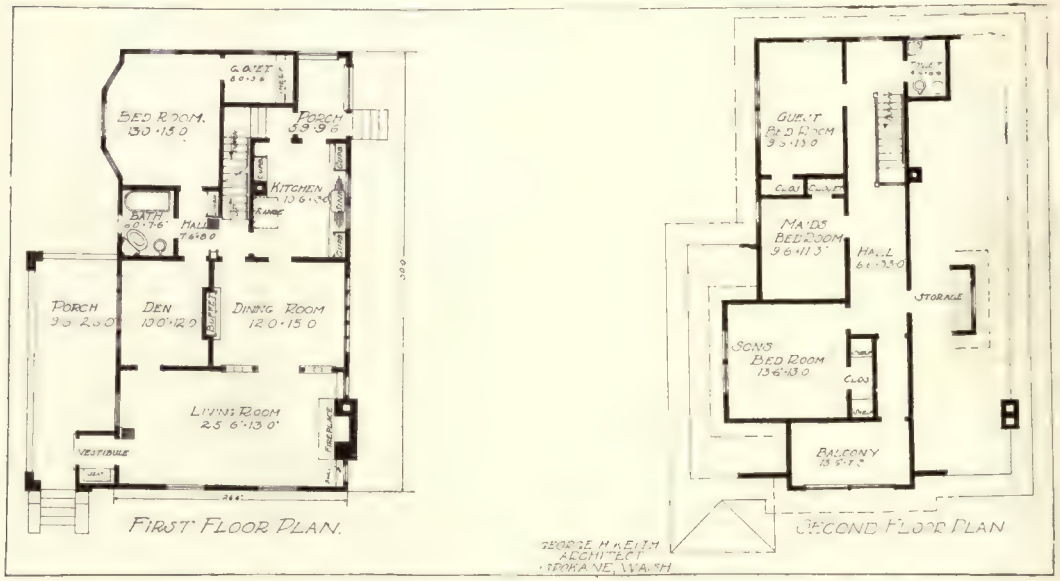


Geo. H. Keith, Architect.

A well designed suburban home on a two-acre plot.

which access is also gained to the bath, den, dining room, kitchen and the stairway going up to the second story. There is a clothes chute from this hall to the basement and a built-in linen cabinet. The den can readily be used as a bedroom, if desired.

The kitchen is completely equipped with built-in cupboards, provision being so made for dishes, cooking utensils, brooms, mops, etc. There is also a built-in wood box. The back porch is screened in as is also the balcony on the second story.



The second floor provides three nice bedrooms, balcony, toilet and ample storage space under the slope of the roof.

Living room, dining room and den are finished in fir with oak floors. The balance of the house is finished in white enameled pine.

The cost of the building complete, as described, would be about $3,300.00. The garage costs about $300 additional. It contains a plastered room and has cement floor.



The garage.

A Cement Bungalow



Chas. S. Sedgwick, Architect.

The over-hang of the cornice is wide, giving deep shadows and adding much to the appearance.

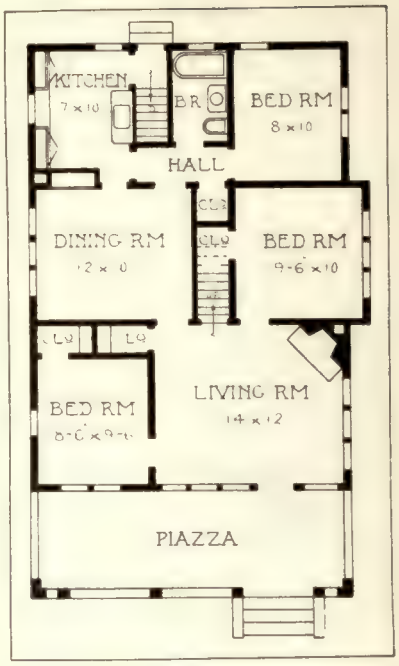
THE size of our cement bungalow as illustrated is 24 ft. in width by 41 ft. in depth, including the front piazza which is 8 ft. wide. There are six rooms in this bungalow. The plan as arranged provides a living room, dining room and kitchen and three medium sized bedrooms. In planning this home the endeavor was to get as much accommodation in small space and at small expense as possible. None of the rooms are large but the arrangement is carefully studied and convenient. To begin with, each of the bedrooms is provided with a good coat closet and in addition there is a good coat closet in living room. A small but convenient bath room is located at the rear. At the right end of the living room is a fireplace with a flue for furnace in the basement; there is also a kitchen chimney.

The stairs lead up from living room to attic, inclosed with partitions on either side. Basement stairs from kitchen. There is a stairway provided leading to the second story and a good floor laid,

but nothing finished. The space can be use for storage or two small rooms could be finished. There is a good birch floor throughout the first story left in natural color and varnished and all the woodwork, casings, doors, etc., are Washington fir, stained dark brown.

The exterior of this cottage is covered with cement stucco down to the grade line and all of the cornices, casings, etc., are either stained brown or painted white and the roof shingles stained green. This makes a very pretty and economical cottage and one that is well suited to a city lot. The "overhang" of the cornice is wide, giving deep shadows and adding much to the appearance.

It is estimated to build this bungalow for $2,500 to $3,000, exclusive of heating and plumbing.



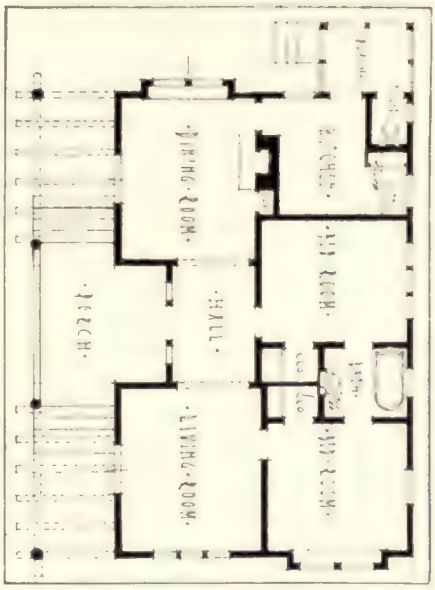
A Simple Bungalow with Log Pergola



Could be built advantageously in the country.

SUCH a home might be built with good advantage in the country where there were woods near at hand and logs could be readily secured. The construction is frame with siding for the exterior. The front entrance is flanked by a rough log pergola and the same treatment is given as a roof for the wide porch. The up-rights of the porch are also logs which are bisected by the double beamed porch roof.

Interior is of unusual treatment. On one side of the central hall is the living room with dining room opposite and the bed rooms and connecting bath are at the back. The whole scheme is conceived on very simple and plain lines. Interior is finished natural. Windows are casement.



A Suburbanite's Bungalow

(Description and floor plan on following page)

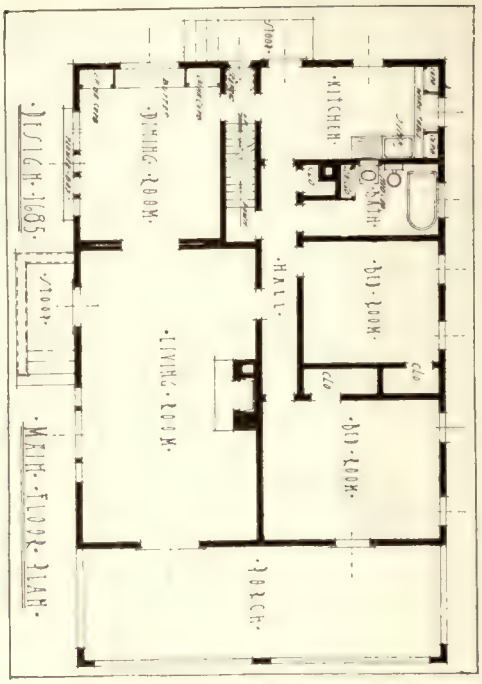


The wide porch gives a countryside atmosphere.

WE have termed this design a surburbanite's bungalow because of the enormous porch and country side atmosphere of the place. The height of the roof permits of securing very good storage space in attic or a couple of rooms could be finished off here with low ceilings if the space were desired for more extra bed room accommodation.

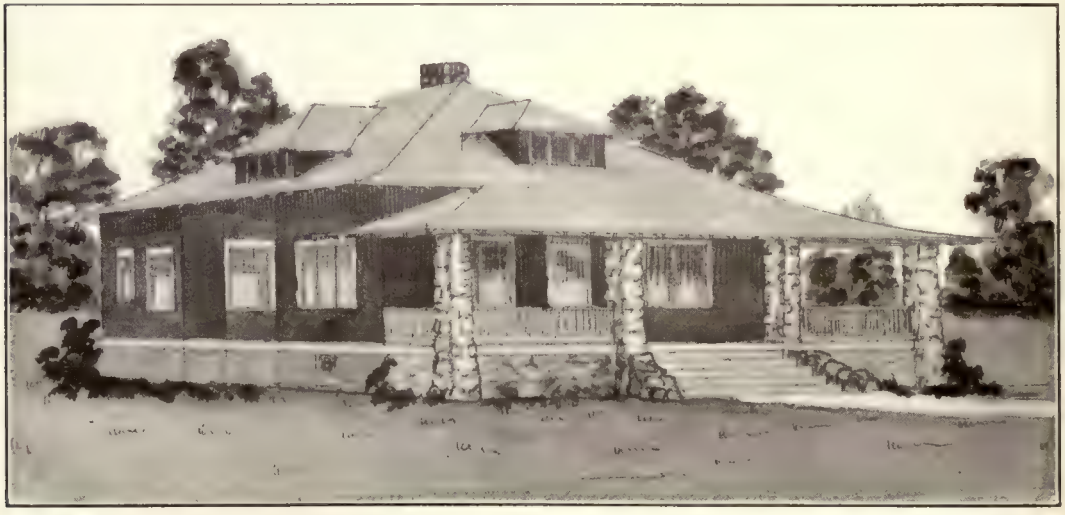
The roof is extended and forms a shelter for the entrance and steps which, with the buttress, are constructed of brick. As in preceding designs, the exterior walls are constructed of rough sawn drop siding and shingles in the gables. The porch roof is flat and has pergola beams.

All rooms are on first floor, there being two good sized bed rooms. The living room is of unusual size, connected with dining room by folding doors. At the rear is a sleeping porch, on the second floor. The interior finish is oak with birch floors in living room and dining room and fir for the flooring in bed rooms, kitchen and bath, also in these rooms the



standing finish is fir, stained. Full basement with fuel bin, vegetable room and laundry and attic space for storage purposes.

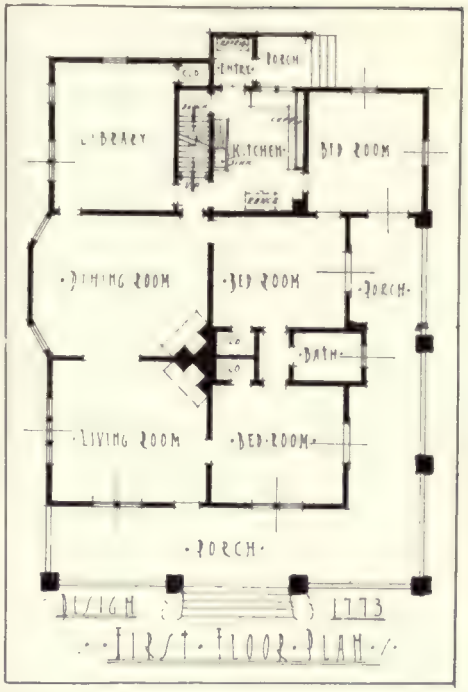
A Bungalow with Large Porch



Field stone is used in the construction of the porch walls and columns, also on the interior fireplaces and chimney.

WE are pleased to show in our next sketch a very popular plan, a bungalow with large porch extending across the front and returning back two-thirds the length of the house. Intention is to screen in the side porch and to use it as a sleeping porch. It conveniently opens off of the three bed rooms. The porch wall and columns are built of field stone, likewise the interior fireplaces and chimney. All rooms are on the ground floor. There is a stairway to a well ventilated attic.

The outside walls are shingled or lap sided, as preferred, and the plans provide for a foundation wall of brick. Full basement with heating plant.



A Small Bungalow

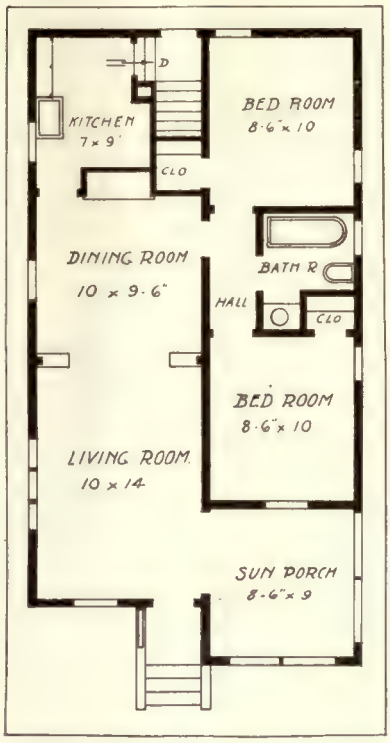
(Description and floor plan on following page)



Chas. S. Sedgwick, Architect.

Simple low pitch gable roof with wide overhanging cornice.

THERE are many people in the cities who have small means and desire to build a cottage or bungalow on a narrow lot and find it difficult to get a plan that will accommodate them and not cost too much. This little bungalow design is intended to meet just such a want, but it must be remembered that where a number of rooms are required, including two bedrooms, that the rooms must necessarily be small.



In this plan there is a pleasant living room with a small front porch entrance, and at the right, a screened-in sun porch, the same to be inclosed with storm sash during winter months. The living room opens with a wide arch with the dining room which is just back, these two rooms giving the appearance of increased size and comfort. In the rear is a small kitchen with one chimney with ample flue for furnace and for kitchen use. The stairs in rear provide an outside grade entrance to kitchen and also to basement which is only under the main rooms, but giving ample space for heater, fuel bin and laundry if desired. The two bedrooms are on the right side and have a small connecting hall and bathroom between. This is a very convenient arrangement, making the bath and bedrooms quite private and retired. The inside finish is in pine stained mission brown and the floors of birch. The outside walls are covered with cement stucco and the inside plastered, making a warm house. The roof treatment is a simple low pitched gable roof with wide overhanging eaves, giving a very pretty and cosy appearance. The shingles to be stained and all the wood trimmings left natural with creosote stain or painted white to suit the taste of owner. The cost is estimated from $1,400 to $1,600 exclusive of heating and plumbing. All in all, it makes a cheap, practical home.

Bungalow with an Unusual Floor Plan

IN this design we have a little bungalow with an unusual floor plan. Instead of the living room extending across the entire front, there is an alcove taken off one end, directly opposite the fireplace, with built-in seats.

The corner fireplace permits the pipe from the kitchen range to enter this chimney by running it through the coat closet. There is not the usual outside entrance to the kitchen in the rear; the grade door is intended to serve as the rear entrance.

The entrance into the dining room is direct from the kitchen. Should one desire

(*Continued on page* 284.)

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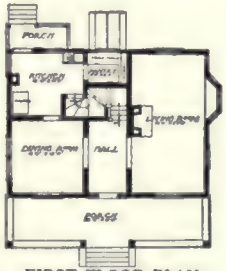
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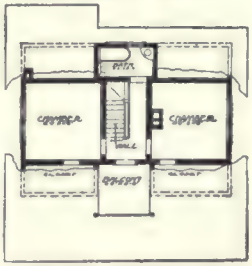


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The exterior treatment is cement over metal lath and rough-sawed boards.

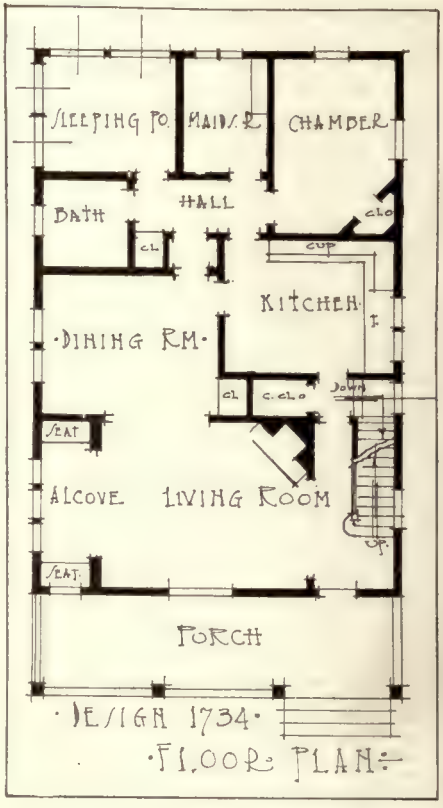
however, to close this up, the double door passageway could be had by going through the rear hall.

There is a good sized chamber, a smaller chamber to be used by the maid, a sleeping porch, bath and linen closet, all to open off this rear hall, which can be reached either from the kitchen or the dining room.

The second floor is used for storage space only, but by enlarging the dormer windows, two chambers with fair amount of light may be obtained.

In the basement there is the laundry fuel and furnace room and a good sized vegetable room.

The exterior of this attractive little bungalow is of cement over metal lath. Below the first story sills from grade to sills, the material used is wide, rough-sawed boards, stained.



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Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

Tiles and Sash Curtains.

IN the first few days of one's arrival in a strange place, one's impressions are naturally somewhat blurred. Later comes the clear perception of detail. And my first impression of the exterior of the London houses is largely made up of tiles and sash curtains. In America we have never taken greatly to tiles and the day of the half curtain passed long ago. It is possible that the sash curtain, covering only the lower half of the window implies the heavy curtain, hanging in straight folds to the floor, another thing which we do not appreciate at its proper value. Be that as it may, a very large proportion of the London houses have half curtains of material more or less thin, and of greater or less elaboration, quite often well drawn back, so that you get a glimpse of the pretty furnishings within. In the old part of Boston, which is so much more English than American, you get just the same pleasant bits of interior as you pass the red brick and white-doored houses.

A favorite sash curtain is a combination of some decorative lace with scrim or batiste, the straight edge of the lace making the upper and lower edges of the curtain, the scallops or points being sewed firmly to the plain material which is then cut away. Filet, antique and the various sorts of braid laces are all used, and this is a suggestion for utilizing pieces of antique lace which many of us must possess. I have seen some very good looking curtains of drawnwork scrim, with which a crocheted lace in a geometrical design was used. So many people like to crochet trimming and yet do not find any very definite use for it after it is made. It would not be a great undertaking to make enough for sash curtains for the front of a city house, with an insertion at the top and an edging for the bottom.

Inside these sash curtains, which usually hang loose at the bottom, the Holland shade is drawn uncompromisingly to the top of the window, to let in all the light possible, and one gets a glimpse of the inner curtains, which quite often are of silk, rose, old blue, or dull green. Pongee in the natural shade is a favorite material for long curtains. When the inner curtain is lined it is probably quite safe to assume that it is made of cretonne or printed linen.

While most of the houses one passes have some sort of thin curtains, quite a number dispense with them and have only the long inner curtains, or sometimes none at all. Sir Frederick Leighton's house is quite guiltless of any but heavy curtains, and, as I remember, there are no shades in the northern windows of the dining room and the drawing room.

One feature of the average London house is horribly ugly—the Venetian blinds, which some of us remember in our childhood, a distressing arrangement of wooden slats strung on tapes and running up and down with cords. Most shades are of plain ecru Holland, very many with lace edgings and insertions, this, too, a fashion which we have discarded.

A Touch of Color.

The window box is much in evidence, and it is very frequently made of tiles. Once in a while they are patterned, but more often are of plain color. Glazed tiles are used and they seem to be available in different shades of yellow, green,



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rose and turquoise blue. The interest which these vividly colored window boxes give to a house of dingy brick or dull colored stone is not easily estimated, even though they are empty in winter time.

The common red tiles are used a good deal for kitchen and hall floors. Artistically they have a great advantage over linoleum, though they are rather cold to the feet, a matter rectified by a rug at points where the worker stands.

The Apotheosis of Linoleum.

Linoleum is in its glory in the British Isles. In America we do not consider it a suitable covering for drawing room floors, but relegate it to the kitchen and side hall. But in plain colors and of a good quality it is a really desirable covering for floors which are not very good, when a large rug is used in the center of the room. Some of the best English linoleums, and they can be had in America as well, are really creditable copies of good designs in mosaic. I have seen one charming arrangement of circles intersecting each other irregularly, worked out in two shades of dull green, which would be a constant pleasure to see. Certainly an artistic linoleum, which can be thoroughly washed is far better for a vestibule, an upper hall, or a bathroom, than a shabby stained floor, which makes a poor pretense at imitating oak or mahogany and can never be satisfactorily cleaned. And for the hard usage of a boy's room a linoleum, with a few small rugs is a very good investment.

The Cult of the Washstand.

Another thing which is not emphasized among ourselves is the washstand. We have a great deal of stationary plumbing, we are quite gregarious in our use of a common bathroom, and we are apt to push the washstand, if it is used at all, into a corner and hide it as much as possible. In England it is a very important article of furniture. It has a marble or tiled top, which is always left uncovered, and a high back of some sort, very often inlaid with handsome tiles. Sometimes a separate towel rack is provided, sometimes there are bars attached to the ends of the stand. You never see our slovenly hanging of towels over the back of the washstand.

When the back of the washstand is not solid, merely a bar between two uprights, it is filled in with a full curtain of cretonne matching the other furnishings of the room. I saw a beautiful bedroom set of very dark oak, with twisted uprights with which a printed linen in purple tones on an ecru ground was used for coverings and for the back of the washstand, with admirable effect. Indeed, everywhere you go over here you are struck with the use made of violet tones.

Much attention is given by English potteries to the making of artistic toilet services, and there is a large choice of graceful shapes in plain color, some of which are very cleverly shaded. There are beautiful ones in shell pink, and you can duplicate almost any tone of color. Among many good shapes, some of the best are very simple in outline, the pitchers merely tall, narrow lipped jugs, very easy to handle and pour from. You get also special services for double rooms, with most of the pieces duplicated.

Portable Wardrobes.

In England, where they do not build closets into houses, or at least not always, one realizes that the wardrobes of our childhood are still in existence. A wardrobe is a part of a set of bedroom furniture, and is often very handsome, with mirrored panels, a really dignified article of furniture. There must be many of these wardrobes put away among ourselves, which could be fitted with mirrors and take their places once more, and in a large room one would be a useful addition to the existing closets, the mirror supplying the place of a cheval glass. They were always made of hard wood and if the layers of varnish were removed and the wood polished a really handsome piece of furniture would often result.

"Golden Ash."

Here they have not our horror of light wood and accept the natural color quite frankly, advertising sets of golden ash. The wood is well polished, the shapes very good and the general effect about that of white mahogany. Dining room furniture has seats of dark blue leather and I can think how well it might look with a plain wall of rather lighter blue and a judicious decoration of blue Nankin china.

The birds are singing, baby calls, and your eyes open on a world of light, purity and cheer. It is a lily-white room, created by the use of Vitralite, the Long-Life White Enamel.

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The Return of Red.

After many years of the undisputed sway of green, it is a pleasure to note that red is once more coming to the front. Not the conventional red which is always to be had and is usually artistically impossible, but the tones with a suggestion of rose, the sort of shade which old Italian crimson velvet takes with the progress of years. As yet these reds are found only in the more expensive fabrics, brocades, velours and the like, but a little of them goes a great way, especially in a piled fabric, and in furnishing a large room they can be associated with cretonne in blending tones.

The color looks better in association with brown oak than with mahogany, unless the latter is very dark in tone. It is at its best with a wall coloring of gray, the light warm tone which we call putty color.

Gray Upholstery Fabrics.

A material which is used a good deal for grandfather's chairs and similar large stuffed pieces is grey velvet, either in stripes or in two-toned arabesque designs. It looks extremely well and is a little different from the usual thing. These velvets, striped, figured, or plain, are made entirely of cotton and very durable. We do not, I think, make sufficient use of the piled cotton materials, so popular in England. They are to be had in America wherever the Liberty fabrics are sold, and are durable as well as beautiful, far more so than any silk material, and as nearly unfading as anything can be.

Inexpensive Rugs.

The rug question is always to the fore in furnishing, if Orientals are out of the question. For hard usage in living rooms the Indian carpets are to be commended, if the decorative scheme is such as to admit of their strong coloring, and their cost is very considerably less than that of most rugs. If one is contented with a rug of good wearing qualities, in perfectly good taste, but wholly negative in its general impression, his needs will probably be met by the East Indian rugs, sold in all our large cities.

It is greatly to be desired that some of our carpet manufacturers would follow the lead of the English factories and give us the very admirable Oriental designs in dull hues, greens and yellows on a dark red ground, which are so cheap and so universally liked on this side of the water. The Orientalism is suggestive rather than imitative, pleasing to the eye and harmonious in coloring.

Summer Rugs for All the Year.

Quite a number of the rugs, which are avowedly for summer use, look well and do excellent service for the whole year. Making all needed allowance for their deterioration in a dry atmosphere, the brown grass rugs look as well in winter as in summer, especially if they are supplemented by smaller rugs of positive color. There is a Japanese fiber rug, of extremely good weave and texture, with a conventional design in a medium brown on a rather dark tan which is admirable for a simple room, having also the advantage of being very reasonable in price, something like seven dollars for the nine by twelve size. The pattern, moreover, is interesting, which is more than can be said of most of the domestic summer rugs which attempt any sort of ornamentation.

Down on Cape Cod they make rush mats which are as good in general effect as the Dutch ones, at a fraction of their cost. The only apparent difference is that our own are made of a flat braid of rush, about three inches wide, sewed into the desired shape, oval or round, while the Dutch rush mats are woven in one piece. Either sort are charming, the natural color of the rushes being relieved by a line of black at the edge. They are specially pretty for old fashioned bedrooms.

Woolen Rag Rugs.

Occasionally one has an accumulation of old woolens and then it is worth while having them made into a rug, as a woolen rag rug is far more durable and less liable to get soiled than the cotton ones. If the rags are light colored they can be dyed before being cut. Green and brown are the most satisfactory colors, and brown rags should be woven with an orange or brown warp, green with a blue warp thread. Old woolen blankets make the best sort of a rug, as they take color beautifully. The thicker the material the narrower the strips should be cut.



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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Harmonizing Walls and Furnishings.

C. C. E.—"I inclose first floor plan of a house we are building, which is situated on a lot 75 ft. front, and facing south. The house is frame, painted lemon yellow, with white trimmings, and sets back in the yard among hard maple trees, and has a good deal of shade on the east. Will you kindly suggest color scheme for walls, rugs, draperies and furniture? On the second floor there will be five bedrooms, all finished in white enamel. Will you include those in your suggestions? Would you suggest oak paneling for the dining room? All the floors are to be oak."

Ans.—It is inferred that the furniture to be used in the three rooms treated in dark oak is also oak, in some of the brown finishes. Our first suggestion is to change the location of the davenport in living room or library, placing it along the stair wall and placing the two bookcases in the end of the room with the west window between them. This will give a much better balance to the room. We think a wall tone of soft putty grey will be the best choice here, with rug and draperies of sage or reseda green. The rug, one of the plain weaves, either Hartford Saxony or Rosslyn, with border in darker tones than center. We would carry the putty grey tone through into the dining room as a wainscot or dado up to chair rail and above this a decorative paper in a foliage tapestry design of blended dull but not dark blues, olives and greys. Here we would use a Body Brussels or a Wilton rug with mixed blues and greens.

In the den, with its red brick fireplace, and heavy furniture, we would still use a grey wall, but different. There is a paper imitation of rough grey crash, which is fine for such a wall, and it should have a frieze decoration in strong, rich, Bulgarian colors, with one of the black ground cretonnes or rich printed linens used in chair cushions, etc. The rug, a Scotch Killmarnock, dark grey ground and dark rich border.

We would make the first floor chamber trim, deep ivory, instead of white, with fumed oak doors and furnish in Circassian Walnut, with soft, old blue walls and ivory ceiling. Old blue Wilton rug.

It is impossible, in this free service, to furnish detailed advice for so many rooms. We must, therefore, merely say that the five chambers on second floor, at least the family room, should have white enamel trim and light, dainty treatment.

Bungalow with Southern Exposure.

E. D. V.—"Will you kindly give me information as to the following:

"My new bungalow faces south. The living room is on the southeast. The dining room is just back, has eastern exposure. These two rooms are to be separated by a colonnade, throwing both rooms in one. The dining room furniture is Early English. The living room is furnished in mahogany, hardwood floors. Please tell me what stain to apply to floors and standing woodwork of both rooms, and how to treat the plastered walls. Must they be rough plastered and what shade? Both rooms will be wood-paneled as high as a wainscoting. What must this wood and colonnade be stained? Dining room is Oriental, with red predominating, though a shade lighter than golden brown and a deep blue are prominent. Living room rug is pastel shades old blues, rose, blue green, etc.

"Also, please tell me if casement windows can be bought ready-made and



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where to buy them, or whether any window sash can be fitted into a casing and opened as a casement."

Ans.—In reply to your inquiries as to finish of woodwork, etc., in your bungalow, the living and dining rooms thrown together by an open colonnade should have the same wood finish, as the columns make this a necessity. The wainscot and colonnade must be the same as the balance of the trim. In view of your furnishings we do not think either silver grey or bog oak would be a good finish, though pine takes these and most stains excellently. We think, considering everything, that dark mahogany would be the best choice, and we would even increase the brownish cast of this stain by adding about one-third brown stain to the dark mahogany.

As to walls—if the plaster is to be tinted, a sand float is better than the hard putty coat, though it should not be "rough." In the dining room we would ignore the red of the rug and tint the wall above wainscot a soft tan or ecru shade. The living room we would make a putty grey and emphasize the old blue of the rug in all the furnishings.

Almost any window can be hung as a casement, but the window frame must be especially made, to permit a casement window to swing either in or out. It is also necessary to have special hardware fixtures for casements. Any sash and door manufacturer in your vicinity can furnish such windows if you give the size of the openings, but, as before stated, the frame, especially the sill, is different from the ordinary, double-hung window. Your plan should provide for all these points.

Rugs and Hangings.

C. A. S.—"I would like your advice on rugs and hangings for my living and dining rooms. The walls of both are the color of rough plaster—sand finished, and the woodwork is dark fumed oak.

"Living room is well lighted on east and north, while dining room has only north lighting. As they open together, I would not like the colors in the two rooms to clash.

"I had thought of a dull blue plain rug for dining room and a small Persian design in rich brown with blue and green for living room. How shall I curtain the windows?"

Ans.—We think your interior as far as you have gone very well thought out. The putty colored natural plaster is a good background for simple furnishings and a good wall tone for northeast rooms. The blue rug will be very good in the dining room if you combine it with old gold or dull yellow, but in the north room you must have some effect of sunshine. We have seen blue and old gold or dull yellow and deep cream combined in rugs and this would be better than plain blue, especially for dining room use. At the windows we would have curtains of plain, dull yellow Sunfast material and if you could have an 18-inch frieze in blue and yellow at the top of the wall, it would add very much.

Your suggestion for living room rug is good, but we would prefer a rug combining brown, cream and rose tones. A Persian pattern usually has rose tones, so would be all right. Then we would introduce deep rose in other ways. For instance, with your rough plaster walls, cretonne of good design and good quality, would be excellent for overdraperies at windows and to upholster a couple of reed chairs. Such a cretonne would cost a dollar a yard. The design should cover closely and have dull red or deep rose combined with browns, dull green, deep cream, a touch of blue, etc.

Scheme for a Semi-Bungalow.

A. W. H. requests suggestions for interior decorating scheme for a story and a half semi-bungalow. Exterior walls are shingles, stained brown and trim is white. Roof is of red tile.

Ans.—First, we do not think the height of your rooms, 8 ft. 6 in., sufficient for beamed ceilings and as you are using the oak wainscoting throughout the first floor these low rooms will have a very heavy appearance. We think, considering the character of your furniture, it will be better to use some stain on the oak woodwork; though it need not be as dark as the furniture; it should have a brownish tone that would be in harmony. We know of nothing better to suggest than a fumed oak stain for all the three rooms.

In the dining room the red rug deter-

Set six screws

And Save $13.25

It takes six minutes to drive these six screws and the saving is $13.25. If your time is worth more than $2.21 a minute, don't read any further. This advertisement is meant for those who want rock bottom prices and approve a selling plan that actually saves money, 30 to 50 per cent.



No. K-49—$7.75



No. 200 Library Table in the white $11.75

30 in. high; top 44 in. x 28 in.; legs 2½ in. square; shipping wt. 150 lbs.

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This beautiful modern design chair is easily assembled and gives no hint of its sectional construction. Unusually rich, wonderful value. 36 in. high, width 25 1-2 in., seat 18 3-4 x 19, shipping weight 85 lbs. Price, unfinished, $7.75; price, completely finished, $9.50 (Imperial Leather Auto Spring Cushion). Cow-hide cover $2.40, roan skin $1.45 extra, finishing materials 50c.

This handsome quarter sawed white oak table, rich, natural markings, two drawers, choice of old brass or wood knobs, compactly packed. Knock-down rate price, in white, only $11.75. Finished to your order, $14.50.

Free Catalog showing 400 pieces, including living room, dining room and bed room furniture—color plates showing actual finish. Take advantage of these low factory prices. We make our own furniture and sell it to you, no middle profits, you get the benefit.

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8

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the preferred wall board

Utility-Board is made of fibres lastingly welded together with asphalt under tons of pressure into one stiff sheet. Utility-Board nails right over old plaster or ceiling or direct to studding and joists.

Can you imagine how splendid a living room with walls and ceiling of paneled oak throughout would look?

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Before you spend one penny further on the plans for your new bungalow, get samples of Utility-Board in different finishes—the four new grained-woods—as well as samples of the standard Utility Board. Our home builders' service department will gladly assist you. Just sign your name in the margin below, clip out and mail to us today

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Manufacturers also of Flex-A-Tile Asphalt Shingles, Asphalt Paint and Asphalt Roll Roofing in Any Finish.

Send me your Utility-Board in the new grained wood finishes. I am interested particularly in using Utility-Board for

mines the color scheme. We do not greatly care for the tree frieze suggested, in this environment. We think if the space above the high wainscot is painted a warm, rich red and if inch-thick wood strips about 3 or 4 inches wide be used to panel off the ceiling in place of regulation ceiling beams and the paneled spaces between painted a deep ivory, that the whole effect would be rich and harmonious.

The living room scheme is again determined by the rug, with blue center. We should paint the walls a warm putty grey and use blue hangings, etc., to harmonize in tone with the rug. The ceiling should be a shade lighter grey than the walls. The hall is the place where we should use paper, or a fabric, above the wainscot. In lieu of real tapestry, we have lately seen a very perfect imitation having broad 8-inch stripes of rich tapestry—coloring and pattern alternating with soft dark grey stripes the same width. This paper costs only $1.00 a roll and if used to a depth of about 4 ft. above the wainscot and finished at the top by a narrow wood molding, would have all the effect of tapestry. Above this, the plaster can be tinted the grey of the paper, this color carried on the walls of the upper hall. The rug should be an Oriental having soft, old red, dull blues, etc.

The best color for music room walls is deep old ivory. The first floor chamber with only a north window should have deep, warm rose, but not pink, walls and white ceiling.

The kitchen wainscot should be painted light brown, the walls deep cream, the woodwork white.

The bathroom wainscot we would paint white and the walls pale rose.

The large northwest chamber, white woodwork and soft ecru, but not grey walls.

The southeast chamber can be done in pale green.

The billiard room woodwork we would paint forest green and paint the walls dull yellow or old gold.

For a Florida Home.

G. H. S.—"We would like to have your ideas of the finish of walls, the finish of woodwork and suggestions for draperies for our new home.

"Floors will be of hardwood. All inside finish to be of yellow pine. Ceilings 9 ft. 6 in. Brick fireplace.

"Will have French glass doors between living and dining room. What would you suggest between living room and parlor, and between parlor and hall, colonnade or French doors? What between hall and dining room? We have French doors at end of dining room leading out to the porch."

Ans.—Your floor sketch shows very large rooms and we think the long stretch of ceiling space in living and dining rooms would be relieved by throwing two beams crossways of the living room each side of the fireplace, dividing the ceiling into three panels and regularly beaming the dining room.

As to the finish of woodwork, the living room should have a brown stain, which southern pine takes very well. The dining room we should finish in ivory white enamel, as pine stained mahogany is not rich enough to go with handsome mahogany furniture. The parlor and hall trim we should paint deep ivory, but make the stair treads and rail with this dark mahogany. The teakwood furniture will look well with this setting. The door from hall to dining room should certainly be one large, single door. From hall to parlor the same; from parlor to living room a plain cased arch with portieres, with a similar opening from living room to hall. As the hall faces north the white trim is almost imperative. We should use an old gold tint on the walls with old gold introduced in the furnishings.

The parlor walls we would hang with one of the Colonial revivals of raised, flock papers; there is a lovely one with the embossed design in deep ivory on a soft tan ground. The portieres and overdraperies at windows should be deep rose velvet or velour, or Armure. The living room walls we would tint a warm, soft, ecru, with cream ceiling.

The portieres should be double between living room and parlor; wood brown on living room side, deep rose on parlor side.

The dining room walls we would do in soft blue with a rug in deep rich tones of blue. The panels between ceiling beams, deep ivory.



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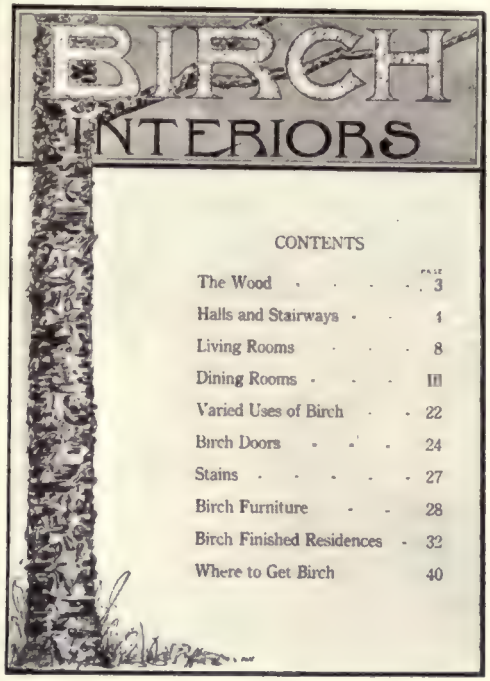
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THE new Birch Book, the cover of which is pictured above, is now ready for distribution. It is 9 x 12 inches in size, well bound in heavy gray paper and contains 40 beautiful pages illustrating modern halls, stairways, living rooms, dining rooms, fireplaces and floor plans—shows styles of interior finish and color schemes that every home-builder will appreciate.

Write today for Birch Book "K" and a set of Stained Birch samples. Kindly enclose 10 cents in stamps to cover postage on book and panels.

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Heating a Bungalow Without a Basement

By Geo. C. Andrews

THIS seems to be a bungalow era and the heating of this type of house is of special interest to home builders. No matter in what section of the country the bungalow is built, the hot water plant means a most efficient heating, contrary to a very common and mistaken idea that hot water is too ideal and expensive in mild climates, which is the true home of the bungalow and where the heating question is not always given the attention it deserves.

Stoves, furnace, steam and hot water have all been tried. Stoves are not to be thought of for a modern house. Stoves in regard to heating are in the same class as the ox-team for traveling. Stoves served the purpose at one time, but modern conditions and improvements have made better methods possible at slightly increased cost.

The bungalow need not be constructed along certain lines in order to install a hot water heating plant. There frequently happen cases where heating plants must be furnished for houses without basements. Such installations call for an intimate understanding of the basic principles of circulation and are therefore not always successful when planned by the "rule of thumb mechanic"; but when designed by competent heating engineers such systems may be provided with the furnace or heating boiler on the first floor level which will give perfect satisfaction.

Usually with hot water heating the boiler is installed at the rear of the house either in the kitchen or perhaps in a room off the kitchen which may have been specially provided for this purpose. If a room for the boiler is built, it is desirable to have the boiler room floor lower than the first floor level of the house, as on the ground level in cases when the first floor is from one to two feet above the ground. The purpose of this is to allow the return pipe from the radiators to be run under the first floor so as to drain back to the boiler. This, however, is not a strict requirement; the boiler may be on the same level as the radiators if necessary.

In a properly designed hot water system it is not necessary to mar the appearance of the rooms by running the main supply pipes on the ceiling of the first floor, as is often done. It is better to rise from the boiler to the attic, where possible, running the main to desired points, dropping down from the attic to feed the radiators on first and second floors.

When so planned there will be no exposed piping except risers and these may be concealed by running inside the partition walls if desired. The return main, of course, is run out of sight underneath the floor, making the complete system as finished and sightly as though the boiler was placed in the basement in the usual way.

It is desirable to cover main supply and return pipes as well as the boiler in such installations, as the different parts are



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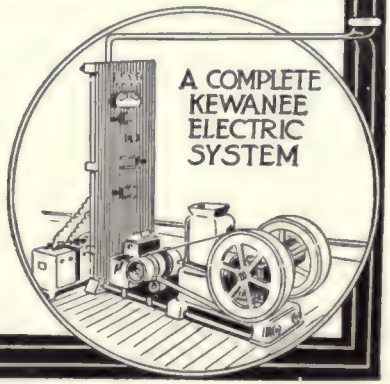
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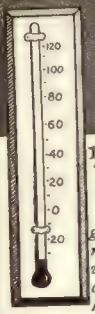
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That's what Mr. Charles Petts writes from Warsaw, Mo. And we can send you thousands of just such others telling of more heat and better heat, at a saving in coal bills of from one-half to two-thirds with a Williamson UNDERFEED Furnace or Boiler.

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Cut Coal Bills ½ to ⅔

FEEDS COAL FROM BELOW.

In the New-Feed UNDERFEED, coal is fed from below. The clean, live fire is always on top, in direct contact with the most effective radiating surfaces. All smoke, soot and gas converted into clean, live, usable heat. Ashes clean and white—and fewer of them.

And the New-Feed UNDERFEED burns any size of coal, from soft coal slack and pea or buckwheat anthracite up. Right there is a great saving you can actually see before you spend a penny. Larger sizes may be used if desired.

Adapted to warm air, steam or hot water. Get a New-Feed UNDERFEED for that new home or other building, or to replace that wasteful, unsatisfactory stove, grate or "overfed" furnace.

50% Saving in Coal Bills Guaranteed.

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Cut-Out View UNDERFEED Furnace.

The Williamson Heater Co.
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Tell me how to cut my coal bills from ½ to ⅔ with a Williamson New-Feed UNDERFEED. Warm Air.....
Steam or Hot Water.....
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more exposed to the cold than where boiler is placed in the basement.

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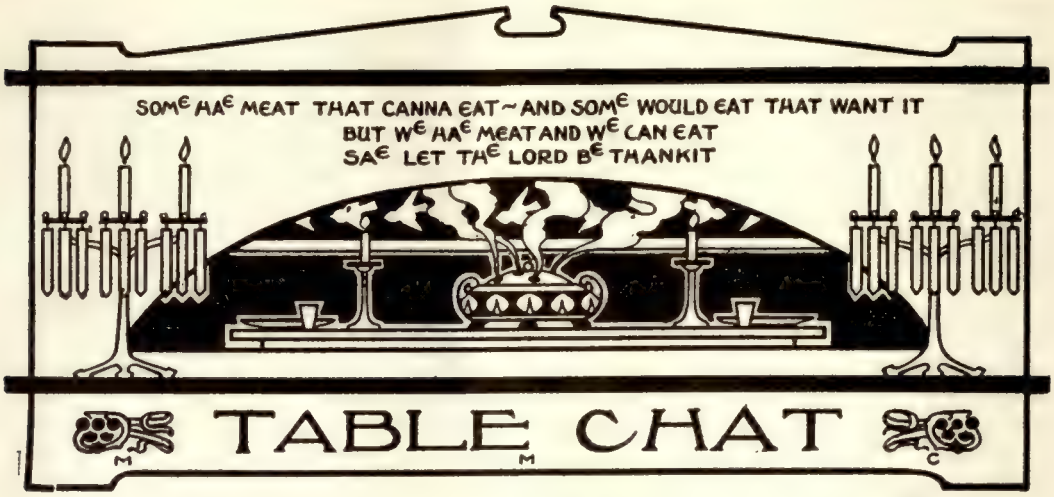
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IN such strenuous times as these the most obvious thing to do seems to be to cut off everything superfluous, to reduce life to its simplest and barest, regardless of its effect upon others. But this sort of thing, if practiced universally would entail widespread distress to a large part of the community, reducing many to the acceptance of charity, who might otherwise earn an honest living. Necessity knows no master, and there may be circumstances in which absolute retrenchment in every department is essential; but, when it is not, judicious expenditure is the best thing for everyone.

There is another consideration. In times of stress, when life is more or less difficult, some sort of social diversion is almost essential, to keep the mind from dwelling upon unavoidable difficulties and trials. The more expensive forms of entertaining may have to be disused, but it is well to continue the simpler forms of hospitality as long as may be.

Spring Luncheons and Dinners.

Perhaps some of our readers will find some menus for simple dinners and luncheons suggestive. By May fruits and vegetables are fairly abundant and reasonable in cost, and they may well form a large part of the company meal, whether served at noon or at night.



Fillet of veal with rice.



If you want your new home to be really complete—

you must not fail to include a TUEC Stationary Cleaner. Within five years practically every new home will have its stationary cleaning system just as every new home today has its plumbing and heating systems. There is no reason why *you* should wait. The

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Unhulled Strawberries.
Fillets of Fish, steamed. New Potatoes.
Fore-quarter of Lamb, stuffed.
Turnips. Radishes.
Lettuce Salad. Cheese Wafers.
Arrowroot Blanc-mange with Whipped Cream.
Preserved Ginger.

II.

Clam Bouillon.
Stuffed Smelts. Cucumbers.



Fish in tomato sauce.

Smothered Chicken. Peas, Potatoes.
Tomato and Lettuce Salad.
Lemon Mould with Custard.

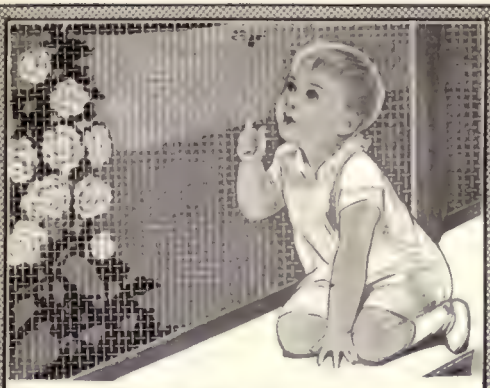
The strawberries for the first dinner should be as large as possible. A pretty way to serve them is to put them on a glass plate, around the base of a tiny tumbler filled with sifted powdered sugar, into which they are to be dipped.

The fillets of fish can be cut from a small haddock, and the skin should be removed. Salt them lightly and arrange them on a buttered plate. Set the plate into a steamer and cook over boiling water for half an hour. Get very small new potatoes and boil them carefully so that they will keep their shape. Serve two or three with each fillet of fish, passing with the course some sort of sauce, which will answer for both potatoes and fish. A rich drawn butter is as good as anything, with hard boiled eggs chopped up in it. Lemons cut into eighths and olives should be on the table.

The fore-quarter of young lamb is quite as good as the leg and considerably cheaper. Have the neck and breast trimmed off, also the small ribs. From the thick shoulder piece which remains have the shoulder blade removed, also the small bones on the lower side. Fill the cavity with a highly seasoned stuffing, dredge well with flour and roast, cooking the rib piece at the same time. Before serving separate the ribs and give each person a rib and a slice of the stuffed meat. The turnips should be small, white ones and served whole in a cream sauce.

For the salad use the smaller leaves of the lettuce and put a generous spoonful of mayonnaise on the side of each plate. For the wafers cream together a tablespoonful of butter, two of sharp American cheese and one of Roquefort. Spread the mixture on thin crackers and brown them in the oven.

Arrowroot is used just like cornstarch, but is very delicate. Flavor it with bitter almonds. Any good jam may be used instead of the ginger, or a dish of crystallized ginger may be passed.



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In preparing the second dinner, use soft shell clams for the bouillon, putting in enough milk to make it creamy, with a spoonful of whipped cream in each cup.

Have the smelts as large as you can get and of the same size. Make the stuffing of bread and butter and season it highly with parsley and finely chopped onion browned in butter. Sew the opening of each fish with fine thread and bake them in a buttered pan. When you make the mayonnaise for the salad take out a portion and add to it chopped capers, pickles and olives for the tartar sauce for the fish.

The chicken is to be dressed, disjointed and each piece carefully wiped with a damp cloth. Sprinkle lightly with salt and cook in a covered pan in a moderate oven, with half a cup of hot water, until it is quite tender. Make a brown sauce with the liquor in the bottom of the pan, reinforcing it with bouillon capsules if necessary, and if you wish adding a few mushrooms to it.

The tomatoes for the salad should be of the same size, carefully pared and soaked in French dressing for an hour or two. Lay each upon a bed of lettuce leaves and fill the cavity at the top with mayonnaise. Serve with brown bread and butter.

For the dessert beat together the yolks of four eggs, the juice of three lemons, two cups of sugar and a cup and a half of water. Soak a large tablespoonful of granulated gelatine in cold water. Cook the egg mixture in a small saucepan until it thickens, add the soaked gelatine and mould. Make a soft custard in the usual way with milk and the whites of the eggs, flavoring it with wine and pour it around the mould after it is turned out.

The Important Thing with a Luncheon.

In planning a luncheon menu the important thing is the principal dish. The invention of most people refuses to go beyond chops and peas, which are often expensive and not always good. Whenever possible the meal should begin with some sort of fruit, and happily grapefruit is almost always available and generally acceptable. Some sort of a fish entrée comes next, and is prettily served in ramekins or tiny casseroles. In this connection deviled clams with green peppers are an agreeable change from the usual creamed fish.

An omelet of some sort is a capital luncheon dish, but it depends very much upon the ability of the cook to make it so that it is done at exactly the right minute. Less trouble and quite as good is an individual service of scrambled eggs, highly seasoned with parsley and any other available "fine herbs" and laid on rounds of crustless toast.

Our illustrations show two dishes, one of which would answer for the main course of a luncheon, the other for an entrée.

The first is a combination of rice and veal. Strips of veal cutlet, two inches wide and five inches long are boiled until tender, the liquor answering for the foundation of a soup the next day. They are then rolled, fastened with toothpicks, breaded and crumbed, and fried in deep fat, before serving they are arranged upon a bed of boiled rice and garnished with olives.

The entrée consists of circles of toast which are covered with flaked fish which has been simmered in a highly flavored tomato sauce, made with stock, and garnished with sliced hard boiled eggs.



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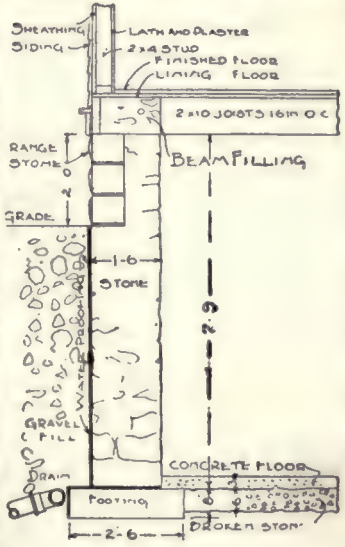
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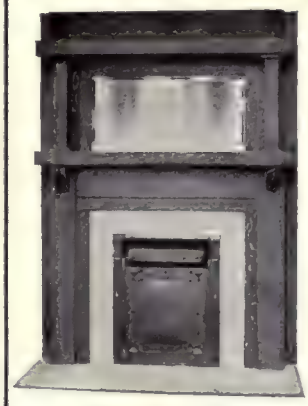
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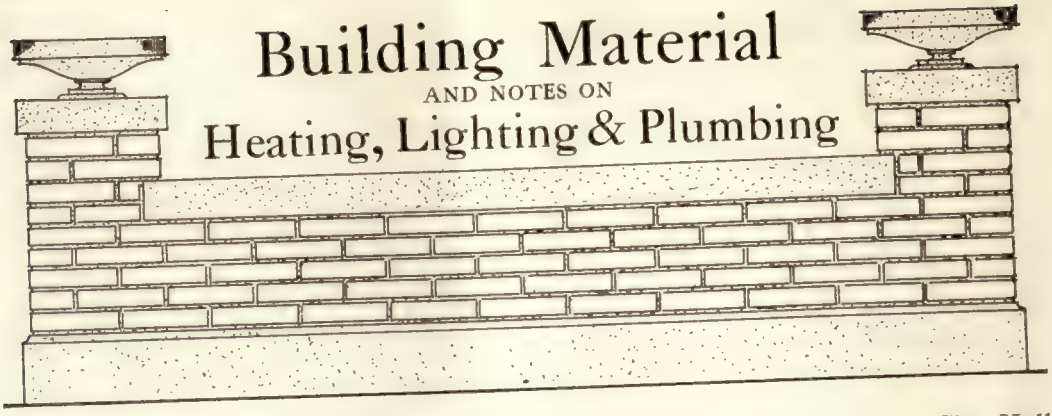
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Something About Casement Windows.

A Comparison With Double Hung Windows—Features of Beauty—A Legacy from the Days of Romance.

IT is curious how architectural habits prevail year after year, even when there is very little reason for their acceptance. Thus the 10,000 architects said to be practicing in the United States would find it hard to present a convincing argument in favor of the form of window in general use in America and yet its use persists. This window is commonly known as the double hung or guillotine type. It is difficult and dangerous to clean. It gets out of order. It is not beautiful.

Apartment House Windows.

Examine the windows of an average city residence or an apartment house. In nine cases out of ten they will be found to consist of two sashes each filled with one pane of glass, wholly without either character or beauty. The somewhat blank expression of these buildings is due, very largely, to the arrangement of their windows and to the failure of the windows to perform the full measure of their service. It must be remembered that to admit light into a room is not the sole function of a window. One of its duties is to give definite expression and character to the building in which it is placed.

To appreciate the truth of this theory one need only to examine a number of city residences, in the older part of New York, for example, where many of the houses still have small panes in their windows. The small paned windows possess a dignity and decision which is wholly lacking to their neighbors. Much of the grace of the New York City Hall is the result of very careful and architectural treatment of its many windows.

Result of a Careful Treatment of the Windows.

Any one who is familiar with the manner of building abroad knows that much of the balance and dignity of the structures is the direct result of careful treatment of the windows, which are arranged not in the double hung or guillotine manner, but with casements which, instead of sliding up and down, are made to open either in or out much as shutters or blinds. Whether the building examined be an Elizabethan manor house, a half timbered cottage in France, or a modern shop building, business block, apartment house or residence in London, Paris, or Vienna, it will be found to have windows arranged in casements which give attractive variety and character.

The casement possesses every advantage which is conspicuously lacking in the double hung window. The proper cleaning of such windows is extremely simple. Being hinged to the window frame, casements require no weights, chains or cords to be repaired or renewed and there is therefore no reason for the removing and defacing of the window frames to examine them.

Upon the score of beauty of effect it may be said that the casement possesses every decorative quality which the double hung window lacks. The use of leaded glass in casement windows has contributed wonderfully to their popularity.

The arrangement of casement windows renders the hanging of suitable draperies exceedingly simple. Such windows are apt to be far too beautiful architecturally



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to cover up or conceal beneath many curtains, and such draperies as are used are apt to be quite the reverse of elaborate.

Casement Windows as a Means of Ventilation.

The casement window possesses another and a highly practical advantage over the guillotine variety which perhaps more than any one of its many excellent qualities will appeal to Americans. Who has not been driven to exasperation during the torrid days and nights to find that the windows could be opened at best no more than half way? With the casement window the case is wholly different, for by its very nature it may be entirely open —it is 100 per cent. window and represents efficiency raised to its highest power.

Windows of this type, besides fulfilling every practical purpose, are sufficiently beautiful to win ready acceptance anywhere. They are a legacy from the days of romance and the forms in which they appear today have, in many instances, been adapted from ancient and very beautiful examples, while the hinges and metal fastenings which lock them and the stays which hold them open at any desired angle are themselves studies from examples made during the golden age of craftsmanship.—*The Building Age.*

The Concrete House.

That "the concrete house" is elusive of definition is made evident by the houses now seen. Cast-in-place houses with solid walls, with steel forms, and with unit wall apparatus; houses of pre-cast units varying from the relatively small block units to light thin sections for double walls and large two and three-ton units handled by an electric crane—all these are in evidence. Then in the matter of architectural development there are various stucco treatments, brushed and rubbed surfaces and beautiful color effects. The concrete house is not one kind of house. Concrete is a universal material and its variety of applications does not lag in realization through any inherent sameness in the material itself, either structurally or architecturally. The applications merely wait upon a skilled hand to work them. That they are being worked out to meet various demands of purse and taste is evidenced by the many examples in all parts of the country.—*Concrete-Cement Age.*

Porcelain Tile in House Construction.

Until comparatively recent times houses were built either of wood or brick. Buildings in the suburbs and rural districts were of frame and those in the city brick. Stucco was introduced a few years ago, and on the heels of that came concrete, hollow tile and concrete blocks. If a scheme that has had the attention of a man for many years materializes, and he says it will, houses built of porcelain will be the next seen in the suburbs of New York. This man is in the porcelain business and is of a family of porcelain makers and has had such a building in mind for forty years.

After years of experimenting he succeeded in making a porcelain tile strong enough for building purposes and soon will erect a house of porcelain. The tile will be built around the skeleton frame of a skyscraper. In other words, the house will have a skeleton frame of steel and the tile will be nothing more than a finish.

The tile will be an inch thick and of strength not expected of such brittle material as porcelain. It is a composition which has taken years to find, and the maker proposes to guard his secret. Besides strength and remarkable wearing qualities the porcelain house will be waterproof and steam proof. Except for the steel frame it will be porcelain. The walls, floors, ceilings, halls, stairs and everything else found in a well constructed dwelling will be porcelain.

It would be possible to wash down such a house with a hose every day if necessary. Not only will it be the most perfect house from a sanitary point, but it is said that it can be built cheaper and quicker than any other type of house at the present time.

Wood Construction.

With the title "Wood Construction vs. Substitutes," F. J. Martin, secretary of the Northwestern Mutual Fire Association, Seattle, Washington, has prepared

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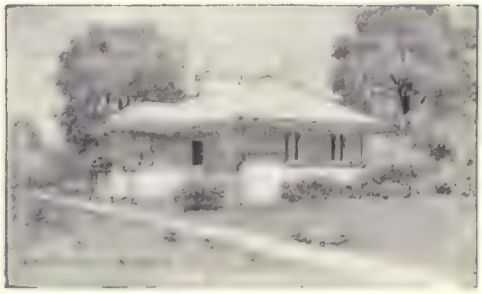
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a pamphlet in which he advocates the use of wood for structural purposes. Mr. Martin believes that the substitutes for wood all have their place in the world and does not pretend to advocate the use of wood where other materials are better, but he says "if wood occupied the place it is entitled to both in the interest of economy and safety, our lumber mills would be running day and night.

That wood is not more generally used and that it is being replaced with other materials Mr. Martin believes is because the public has not been properly educated. He says: "The remedy lies in a campaign of education reaching all classes of prospective builders so as to stand the severest test. The builders of factories, warehouses, etc., must be shown the advantage, considering both the first cost and insurance cost, to be obtained from this class of construction. The prospective home builder must be shown that a given amount of money will produce a very much more economical and satisfactory home of wood than of any other material. Cities must be shown that they should encourage the ownership of small homes; that this can only be done by permitting wood, shingle roofed construction outside of the congested districts. They must be shown that prohibiting frame dwellings and shingle roofs in the main residential districts of the cities is to place an unfair tax and burden on their most deserving class of citizens."—*Mississippi Valley Lumberman.*

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Stucco Finish.

H. O. S.—"Several builders have advised against building a stucco house, saying that the expansion and contraction around doors and windows makes it impossible to get them tight. What is your opinion?"

Ans.—When applying stucco to the exterior much care should be taken with this material. Do not try to get along with the service of just a plasterer, but get a man to do it who is experienced in handling outside work. It is, of course, pretty difficult to get a guarantee against stucco cracking because sometimes the frame work will settle or, due to contraction and expansion, cracks will open up. Stucco finish on my own house has been on nine years and I don't think there is a crack anywhere. It is used a good deal and with much success.

Quality of Sand.

F. E.—"I will build this summer and will use plaster, concrete, stucco and Keene's cement in different parts of the building and we have two qualities of sand handled here by competitive dealers and each dealer finds fault with the other fellow's sand. I think the sand plays quite an important part in securing a good job in using the above and wish you would tell me which of the samples enclosed is the better for me to use. I have marked them 'A' and 'B'."

Ans.—Have examined the samples of sand which you sent me and report that for first class cement work I recommend that you use the fine sharp sand, sample "A." The other sand is all right for grouting or rough foundation work. It is gritty but is pretty dark and where you want a nice looking job it should not be used.

Question of Wood to Use.

H. E. R.—"In the finishing of my new home I am undecided what kind of wood to use for interior trim for first floor. I like walnut, oak and cherry very much, but do not know which to use. Could I combine two or all of these woods? Please give me your advice."

Ans.—Certainly the American walnut is a beautiful wood for interior finish. I wouldn't make too much of a mixture of woods if I were you, but it would be a beautiful wood to use in your dining room. If you are going to have columned openings, however, from the living room into the dining room, then the same wood would be used in both rooms for, of course, it would look funny to have cherry finish in the living room, walnut in the dining room and then have walnut columns or vice versa. This would apply equally as well to the columned opening in front of the stairs. Therefore, in consideration of the columned openings, it would be best to have one wood only in the living room, reception hall and dining rooms. You might use the walnut in the den. If I had my choice I think I would use cherry in these rooms and walnut in the den, but if you should like cherry the least of the three woods, then make it oak.

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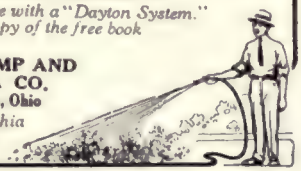
It tells how to choose and install the pumping equipment best suited to your requirements—insuring you unfailing service and economical operation. It tells exactly what each system will do and how much it will cost.

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We build every practical type of hand or power driven pumping system, for deep or shallow wells, open or pressure tank, for city or country houses, factories, farms, greenhouses, country clubs or hospitals.

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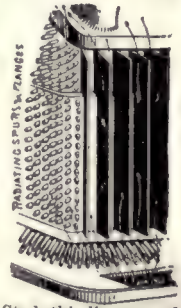
are combined to secure coziness, comfort, health and economy in

Many styles of grates and mantels to choose from.

The JACKSON VENTILATING GRATE

will pay for itself in three years by giving four times as much heat as the ordinary old-style grate from the same amount of fuel. Not only warms *Directly* by the fire in the grate, but warms *Indirectly* by drawing in fresh air from outside, warming it in the air chamber surrounding the fire and sending it into the room. Also heats connecting rooms and also rooms upstairs if desired. Any mason can set it up from our Complete Plans Furnished FREE. Better than a furnace for Fall and Spring—more cheerful, less attention, about half the fuel.

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Study this diagram and you will see at once the heating and ventilating principle which makes this grate superior to all others.

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is singularly *lonesome* in its relation to the "dusty and dirty" characteristic of ordinary furnace heating. Its absolute freedom from leakage at the seams and the impossibility of the seams ever opening, through expansion and contraction, constitute the greatest feature of this furnace, but we have not overlooked *efficiency* and *economy*.

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You will find valuable instruction on furnace heating in our hand book, which is yours for the asking. May we not send you one?

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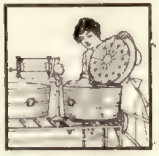
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feet high with a window in the space. There is no weight of course on the brick wall, the roof being carried on the wood frame work. If, in your opinion, it is absolutely necessary to have it carried on iron would 4x4½ angle-iron do, or smaller? My carpenter contractor seems to think it will be perfectly satisfactory to carry the brick wall on wood beam as stated, supporting same at each end by upright pieces down to the foundation walls. If he is right, don't you think the shrinkage of the wood would be enough to crack the wall?"

Ans.—In answer to your inquiry would say that I think you would find it a good deal better to take care of that 12 ft. span by using a light steel I-beam. It won't cost you much more and will be better construction, insuring you against any possibility of damage on account of shrinkage. Do not think that it would be well to use the 2x8s. If you decide to use the timber, be sure that it is well seasoned.



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Also Tiles and Mosaics

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attractive color plates that are included in a practical and helpful portfolio every one interested in cottages or bungalows should have. It is called

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and is full of valuable hints on the painting and decorating of houses—especially the bungalow type. It is now being offered for the small sum of two 2-cent stamps. Send them to

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SPLINTERS AND SHAVINGS

Now is the Time to Build.

ALL over the country the papers have been laying particular stress on this being the time to build. Some of the arguments put forth have been well worth serious consideration, and all of them are timely and ought to be acted on by those who have the money to build. The Northern, Western and Southern papers have been publishing a good deal of matter of this kind. A recent issue of the Albany Herald, of Albany, Ga., has a good article along this line, saying among other things the following:

"The war in Europe is not going to last forever. It must end some time, and conditions are not apt to grow worse than they are now. They are more apt to gradually improve as the industrial and commercial world recovers from the shock of changed conditions and adjusts itself to the new order of things.

"In the meantime, consider this:

"Labor is cheaper now than in many years.

"So is building material of all kinds—lumber, brick, lime, cement, and almost everything else that goes into the construction of a dwelling house or a business structure.

"Therefore, those who are in position to do so should seize the golden opportunity and get ready to take advantage of the 'good times' which are sure to return before very long.

"Such a policy, if adopted on a considerable scale, would stimulate all lines of business. The unemployed would be given employment. They would have money to spend and it would be spent with the merchants in all lines of trade. Business would pick up in gratifying manner through all channels of trade.

"Then there are those who could take advantage of the low cost of labor and material by making minor improvements if not in position to embark on more extensive building operations. Homes could be repaired and painted. Premises could be put in first-class condition. The whole town could be made to look better and numbers of people would receive employment who are now out of work."—*St. Louis Lumberman.*

Authority to Employ Architect.

A corporation is not liable on a contract employing a firm of architects to prepare plans for a building, if the agreement was not authorized by the Board of Directors and if the proposed building would involve an expenditure largely in excess of the capitalization of the company. This is, in effect, the decision announced by the Appellate Term of the New York Supreme Court in the case of Thompson & Frohling vs. Marseillaise French Baking Company, 147 New York Supplement, 402. Plaintiffs, a firm of architects in New York City, sued for $700 as compensation for preparing plans for a building to cost $125,000. Defendant company defended the suit on the ground that its president, with whom the contract was made, had no expressed or implied authority to contract concerning so expensive a building when the capital stock of the corporation was only $10,000, especially in view of the fact that the land on which it was proposed to erect the building, did not belong to the company. The Appellate Term sustained this defense, declaring that the making of such a contract was not within the scope of the president's general authority, and that plaintiffs were bound to take notice of the limitation upon his authority in this respect.—*Building Age.*

Salem's New Building Code.

The new building code which was adopted the third week in August by the Rebuilding Commission of the city of Salem, Mass., specifies that for structures which may be erected on the burned district, the roofs must be of slate, tile, terra cotta, metal or some other equally incombustible material. The code allows



No Matter

what the cost of first appearance, your satisfaction and your money's worth are *finally* measured by the Quality of the Fixtures that go into your bath room.

Send for a Wolff Bath Book

It will suggest arrangements and show appropriate fixtures for your home, fixtures of Wolff Quality and design, whether simple and expensive or elaborate.

60 years' experience in manufacturing every item of a complete plumbing equipment is back of every Wolff design.

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Write today for sample colors on wood and book of "CREO-DIPT" houses in all parts of the country. Names of architect and lumber dealer appreciated.

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for factory and mill construction, but these buildings must be of first or second class construction or built with a mill frame and an exterior of metal or other incombustible material.

In regard to the residential section the Code reads as follows:

"No building will be allowed to run nearer than 5 ft. to the adjoining lot, and there must be a distance of at least 10 ft. between buildings on the same lot. No building shall occupy more than 75 per cent. of the lot on which it is built, unless it be on a corner, then it may occupy 80 per cent. of the lot."

The new regulations apply only to the burned district.

Limiting Frame Houses.

The suggestion of placing a limit in the suburban districts of New York outside of the fire limits within which frame construction will be restricted to detached dwellings appears to be meeting with considerable favor. Reports from the boroughs affected show that many of the real estate operators as well as the residents approve of the project and the feeling is quite general that all sections of the city in which development of any kind has started might very properly be included. In view of this general sentiment the outlines for the suburban limits have been drawn to include large areas where heretofore there was no restriction.

Tree-Breathing.

Trees breathe the same as animals says an exchange. They inhale oxygen and exhale carbonic acid gas. The oxygen is taken in through the leaves and through the minute openings in the bark, called lenticels. This process of breathing goes on in the tree day and night but assimilation takes place only in the daylight.

Plant a Tree.

Whether it be a fruit tree, an ornamental tree or a timber tree, the time devoted to planting it is well and worthily spent, says the *Louisville Courier-Journal.* Within the last two decades the whole country has awakened to the importance of the forestry question. All states should be interested in preserving the remnants of our goodly forest heritage, and in passing on to future generations a land beautified and glorified by its wealth of trees.

It requires years for Nature to build a perfect tree, and it requires only a few moments for a man to destroy Nature's work. The time has come when Nature must be assisted in the beneficent task of reforestation.

Hints on House Planning.

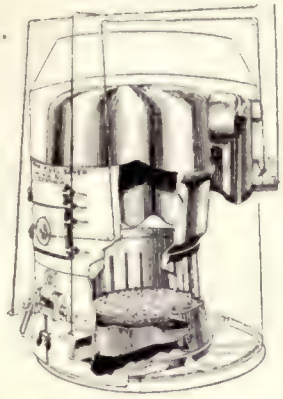
When you commence to plan your new house get a good-sized scrapbook in which to paste every kind of a suggestion you come across. There are hundreds of little ideas, as well as some larger ones, which will help you give your home added charm or comfort without much increase in cost. Ideas about built-in things, from a simple shelf to a medicine closet or a seat in an inglenook. There are things to do and things not to do about the placing of lights and of radiators and of water or steam pipes. There are principles of harmony to be remembered in the selection of rugs, draperies, wall decorations and furniture. We all run across such suggestions, but rarely remember them. So get a scrapbook, or else a large envelope or a flat box, labeled "The New House." It will pay.

Budapest Abolishes Carpet Beating.

Budapest, Hungary.—The municipality of Budapest has issued a regulation that in future all carpet and rug cleaning in the city shall be done by means of vacuum cleaners, which the government intends to purchase in large quantities and sell at cost price to purchasers.

Budapest is one of the cleanest cities in Europe. There are stringent regulations which require every house to be kept in the most perfect sanitary condition, householders being responsible not only for the staircases and courtyards, but also the sidewalks around the houses.

There is, however, one institution which has caused not only residents but especially visitors and tourists to wonder why the authorities insist in general on such a high standard of cleanliness and at the same time allow this to continue. This is the custom of carpet and rug beating in Budapest. The noise caused by 30 to 40 servants beating carpets simul-



Good Reasons Why You Should Install the

Fuel Saver Furnace

1st. It is made from Charcoal Pig Iron, perfectly fitted, every piece being cast, which insures no weak parts to burn out.

2nd. It is modern in Construction, having a straight fire pot, taking the draft through slots, which makes perfect combustion besides placing the flame where it will do the work properly. Grate can be removed through ash pit doors, and any section can be replaced without the aid of a mechanic.

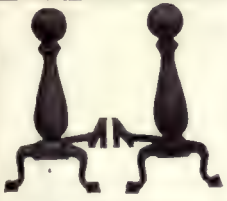
3rd. It has a large heating surface and also a large casing, which makes it possible to get full capacity without forcing, and insures a cool cellar.

4th. All parts being heavy and substantial, long and satisfactory service is assured.

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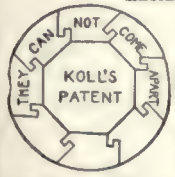
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taneously in various parts of one building is very great, and the air in and around the house is full of dust. General satisfaction is expressed at the new regulation of this paternal government.—*Ideal Heating Journal.*

Effect of War on English Building Industry.

Advices from English sources are to the effect that the influence of the war on its industries is beginning to show itself in the official returns relating to unemployment. In some cases a seasonable decline had already begun before the war broke out so that all of the idleness was not due to that cause. In many trades and very largely in the building industry short time had been resorted to in order to avoid laying off workmen. The figures of unemployment among members of the insured trades show that the percentage of idle among carpenters at the end of August was 5½ per cent.; bricklayers, 5.7 per cent.; masons, 3.8 per cent.; plasterers, 7.3 per cent.; painters, 9.7 per cent.; plumbers, 4.9 per cent., and laborers, 6.2 per cent. Taking all the occupations together the percentage of idle was 6.2 per cent.—*Building Age.*

Steam Pipes as Lightning Rods.

A writer in the *Scientific American* suggests that in radiator heating systems the piping is for the most part very straight, forming paths of low impedance to the passage of lightning, and as the piping is also usually directly connected to the underground piping of the water works system there is thereby affected a most effective "capacity ground," and a more attractive path for saving a building from lightning discharge it would be difficult to imagine.

Cement Blocks.

In some foundation walls where crushed rock or stone is not available, cement blocks are made up first, and then placed in the wall as ordinary squared masonry. It has become common practice to make a concrete wall in the ground where it will stand alone, up to grade level and cap off the basement wall with cement blocks. This has been found somewhat cheaper and a good many people think the outside appearance of the wall is better than that of the concrete, which would be spatterdashed. These concrete blocks are made 5x12x24 or 5x12x16.—*Mississippi Valley Lumberman.*



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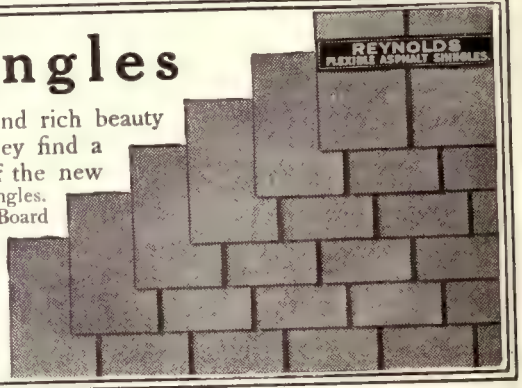
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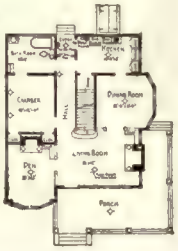
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New Booklets and Trade Notes

ONE of the most artistic and nicely illustrated refrigerator catalogs seen in a long time has just come from the McCray Refrigerator Co. This book is beautifully printed with a picture in colors on the front cover, representing a large country home.

The latest conveniences in refrigerators, icing of boxes, etc., are very fully covered in this catalog, showing a number of pictures of how refrigerators are iced from the outside. Copy of this catalog will be mailed on request.

* * *

"Always Fresh Water" is the attractive title of a booklet, issued by the Chicago Pneumatic Pump Co., showing practical methods of installing their water systems. This booklet shows a great many illustrations of the different features of this system; also cuts of the different styles of engines and motors that can be used.

* * *

A very attractive booklet has come to hand from the Ullman-Philpott Co., under the subject, "Light Without Power." It gives a few simple suggestions for cutting down current expenses and making factories, stores, offices and homes brighter, more cheerful and sanitary by the use of their products, "Porcelain White" and "Pastello" wall finishes.

* * *

Another booklet of similar nature has been received from the U. S. Gutta Percha Paint Co., setting forth the advantages of "Gloss-O-Lite, a paint that floods rooms with light." This paint is recommended by the manufacturers for use on interiors of all kinds, because it makes rooms light, has a smooth surface, holds very little dirt, and can be cleaned without destroying its smooth surface.

* * *

How to have hot water instantly is given in a new booklet, recently received from the Hoffman Heater Co. This booklet is very attractively made up and gives a very comprehensive description of the different styles and sizes of the Hoffman Heater.

* * *

In this day and age, with the ever increasing popularity of concrete and cement construction, there is appearing on the market a number of coatings for the protection and decoration of buildings so constructed. Among these preparations is one manufactured by the Wadsworth, Howland & Co., Inc.

We have their interesting booklet describing their product, the Bay State Brick and Cement Coating; which also shows a number of buildings it has been used on. The number and size of the buildings illustrated speaks very well for this coating.

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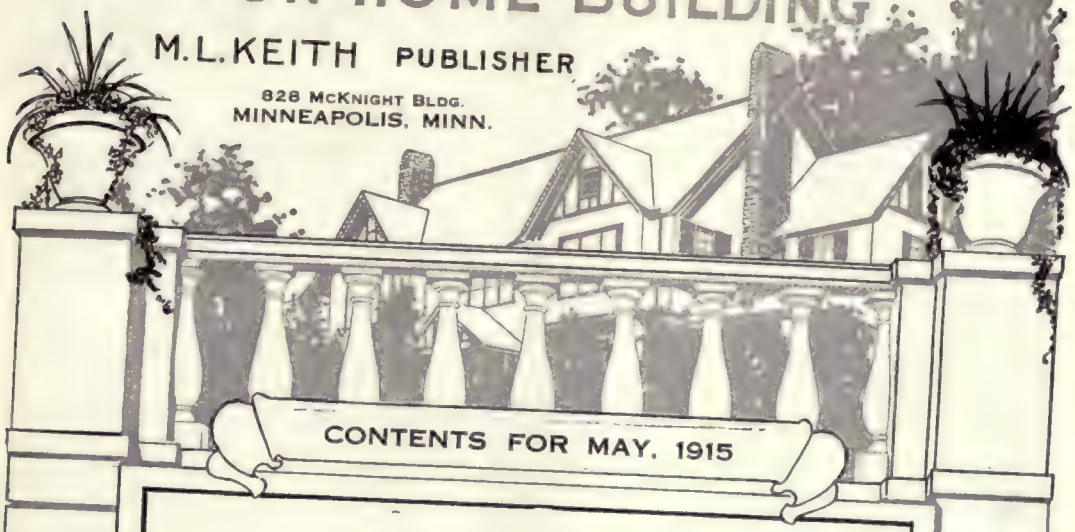
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Hewitt & Brown, Architects.

A charming and well balanced entrance to a beautiful Minneapolis residence.

KEITH'S MAGAZINE

VOL. XXXIII MAY, 1915 No. 5



A present-day Colonial cottage in Pennsylvania. The gambrel roof and Dutch dormers make plenty of space upstairs.

Brick-Built Homes on Colonial Lines

William Draper Brinckloe, Architect

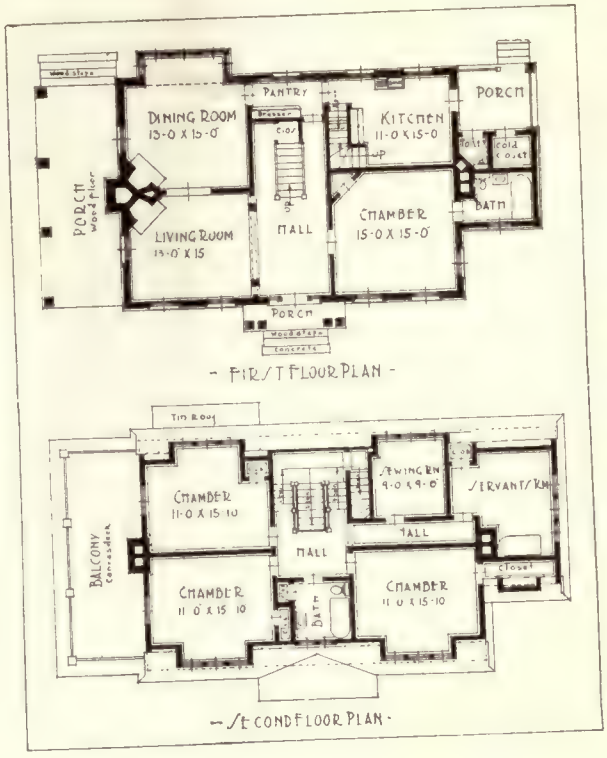
*" * * * He's a wonder; he can turn a brown stone house into a colonial mansion with a pot of yellow paint."*

—John Kendrick Bangs.

EXACTLY; that's the conception of "colonial," to many modern minds: * * * Some great yellow, sponge-cake of a house, iced over with a weird white crust of columns, cornices, friezes, pilasters, panels and what not!

And yet nothing could be further from the real colonial; the simple, homelike houses of the Eighteenth century farmfolk who lived along the Atltantic seaboard from northern New York to southern Virginia. The New England farm-cottages, though with a certain picturesqueness, are apt to be rather crude frame or shingle affairs; while the far southern houses are either huge mansions or mere wooden cabins. But the

Middle Colonies nearly always built of good red brick, with practically no ornament save a white-columned porch or something of that sort. But the proportions of these houses are most wonderfully good; and therein lies their charm. Further, the plan is nearly always sane and simple—a central stair-hall, running through the building, with balanced rooms on either side; then a kitchen is thrust out in a little wing of its own, keeping heat and odors well away from the main house.



Many of these old-time homes are of the bungalow type—story and a half; some have gambrel roofs, while others keep the simple straight pitch. Then there are also the regular two-story houses, with attic above. So, now, let's see what may be done along these lines.

Figure 1, for example, shows a modern gambrel-roofed home, following strictly the spirit of the Eighteenth century, yet fully fitted to the needs of the Twentieth. There is no superfluous ornament; effects are had through the proportion of the house, the grouping of the windows, and such like. All good colonial builders, however, spent some time and trouble over the entrance-way—a bit of elaboration there to relieve the severe simplicity of the rest of the structure. And so it is here; delicately designed side-lights and fan-light, quaintly paneled doors and white-pillared porch; all carefully proportioned to the rest of the house.

The brickwork is colonial in feeling, though just a little out of the ordinary. Instead of the usual "Flemish bond," with black headers and red stretchers, this is laid up with all headers and no stretchers. In other words, we went through a local brickyard and picked out the rough, dark, over-burned brick; then we laid these up in the wall with the ends outward, using grayish white mortar and very wide joints. The effect was wonderfully good—no raw redness, but just a dark, brownish tone, with a sparkle of light and shade, and a picturesque suggestion of ripe age. The gables, dormers and gambrel roof are covered with gray shingles; also the little wing at the left.

Inside the house a central hall runs through, with a most interesting double stairway at the rear. Beneath the landing comes the pantry, connecting kitchen and dining room. At the front a living room lies at the left, with a bedroom balancing it on the right; the private bath is thrust out in the wing.

In the second story we work three good bedrooms, a sewing room and a servant's room, besides a second bathroom. In an



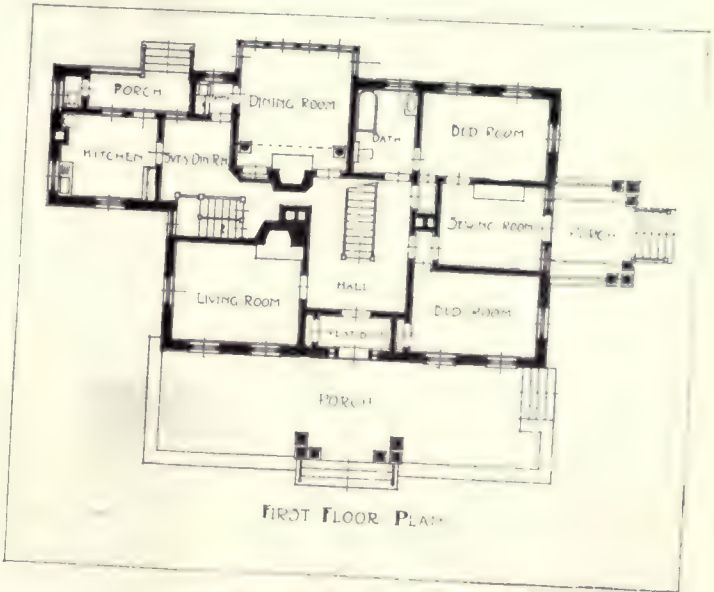
A Colonial bungalow in Delaware. The brick work is very unusual.

alcove of the servant's room, by the way, a bath tub is set, screened off with a curtain or some such thing.

A back stair runs down from the landing of the main stairway and above one of the rooms a trap door and step ladder reached the low attic.

Figure II is another type — a plain hipped roof instead of a gambrel. The brick walls are built all headers, as in the first; the porch, too, is somewhat the same. But the proportions of the house are totally different. A stone-walled terrace, paved with brick, runs all across the front; it is bordered by a close-clipped privet hedge. The roof lines are low; indeed, the whole effect is horizontal.

On the first floor is the characteristic central hall; a house without this feature is really not a colonial one! Off to the right we have a sewing room (or sitting room) and two bedrooms; the bathroom is beneath the stair landing. The dining room is partly under the landing, and partly projecting out to the rear, in a bay window. This bay is quite a feature; it makes a most bright, sunny dining room, with a wonderful view out over the old-fashioned garden to the



FIRST FLOOR PLAN

rear, and the beautiful scenery beyond. The little pantry connects with a servant's dining room; from this latter the cellar stairs go down, and the back stairs go up. Off beyond this is the kitchen wing, fully separated from the main part of the house, and having light and air on three sides.

The living room or "parlor" is at the front, on the left. Now, I haven't shown the second story plan of this house, because it is rather unimportant. There are three fair-sized bedrooms and a very large store space; but the roof slopes down, cutting off some little head-room, except where the dormer windows come. Indeed, this particular house was designed to fit the needs of two elderly ladies—both over 80 years, at the time they built—and the upstairs bedrooms were meant merely for servants and an occasional guest. If a larger family should want a home of this type, the kitchen wing might readily be extended somewhat, giving space for a full dining room out there. Then the present dining room could serve as an extra bedroom, and another bath be put in, either on the first or second floor.

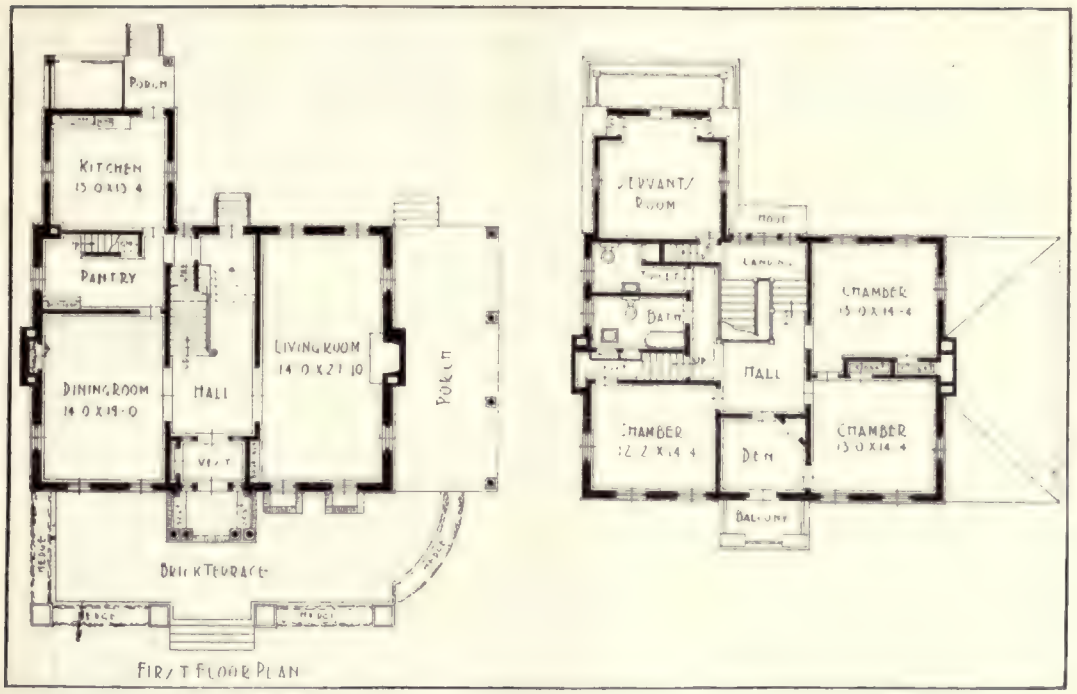
But now we come to the third type of colonial house; the more usual one (Fig. III.)

Here nearly everything clings quite closely to precedent. The bricks are laid with red stretchers and black headers, the corners of the house show brick quoins, and a belt-course of brick on edge runs beneath the upper windows. The arches over the first story windows are, however, a variation from the ordinary; and the plainness of the chimney is relieved by brick paneling. The entrance porch, too, is just a trifle more extensive than usual, and the balcony is decidedly more convenient than the mere pent hood that sheltered most Eighteenth century doorways.



A modern Colonial house keeping close to the simplicity and refinement of eighteenth century models.

The first floor plan might stand for any Eighteenth century home—central hall,



with doors at either end, library to the right, dining room and pantry to the left. Then the kitchen is entirely out at the rear; its flue, by the way, racks over in the wall, above the pantry window, until it joins the main chimney.

The second floor is a trifle unusual. Ordinarily, there would be just four balanced bedrooms, with possibly a bath at front; but the owner wished a den, so we sacrificed one of the bedrooms and put in separate bathroom and toilet. The servant's room, out over the kitchen, is cut off from the front of the house, save by way of the landing on the front stairs. Of course it would be easy to change this and make the rear bedroom into a guest room.

The attic isn't finished, though there is ample space for two good large bedrooms, and a very decent storage room. If we choose we can run the main stairway on up, instead of depending on that little closet off staircase—it rests on the personal preference of the owner.

* * *

So, now, here are three types of brick houses of colonial feeling. Surely you must be hard to suit if one or another of them doesn't appeal to you!

A California Country Home

Margaret Craig

MOTORING south from Santa Barbara, along the road that commands a beautiful outlook upon the vineyards and mountains of the west and the wharfed harbor of the old town on the right, the visitor finally reaches Montecito, a suburb of beautiful residences.

It is two miles away from the old mission city, and as it is not connected by a car service, it has remained exclusively a place for country homes. Most of the houses are some distance apart and usually approached by long driveways. Sometimes they are built in a grove of trees, or high up on the mountain sides, and sometimes near the edge of the ocean—all according to the choice of the builders.

Swinging away from the intersection of the main roads, which is marked by a large white public fountain, the car approaches the very attractive home of Mr. Augustus Higginson, at the end of a line of eucalyptus trees. It is situated within a few rods of a promontory reaching over the sands of the beach and commanding a wonderful view of the opalescent islands in the distance, and of the rolling hills toward the west.

It is a house simple and substantial in structure, and is thoroughly related in lines and material to its surroundings. In fact, it seems to belong to the land, and as if it had been there always.



The attractive home of Mr. Augustus Higginson, Montecito, Cal. Designed by J. Corbley Poole.

Mr. J. Corbley Poole was the architect, and he has shown here his unusual skill and taste in handling the material and making a perfect adaptation of an old English country home. This is shown in the combination of red brick, which is used for the exterior of the lower part, and in the Elizabethan half-timber used for the upper half of the structure. The gables, three in front and three in the rear, are well placed, and, of course, form an important feature.

to be entered. The heavy oaken door opens into the spacious living room. Just inside of the entrance door is a carved wooden screen and chair, placed so as to form an ante room for the incoming guests.

This larger room is square, but the fact is not obvious, due to the wise breaking up of spaces. For instance, one corner is devoted to the piano and a huge carved high-backed seat; another to the fireplace and comfortable chairs gathered



A very unique feature of the house is the court, framed on two sides by the rear wings.

A soft green lawn surrounds the house, and is only broken by the long line of dahlias on the north, and by the walk that leads from the curving roadway to the front door. The live oak at the corner of the lawn, with its widespreading branches, has been saved, and the house placed so as still to preserve the view.

The entrance is very simple and effective, marked only by a stone platform or porch and a wrought iron lantern at the side. This doorway is placed at the side of the front of the house, as if it, as well as the tree, were willing to be a subordinate feature, so as to give dominance to the landscape windows of the room about

around it, and the third to a place nearer the front door devoted to entertaining more formal guests. Great taste is displayed in the arrangement of huge sprays of wild grasses or odd colored flowers in bronze or dull-colored vases. They take away the stiffness and unite the lines of the room.

In the space before the fireplace is a broad, carved table and near it a wide bench—also carved by the owner of the house. The fireplaces throughout the house are most carefully planned and vary in regard to the color and to the laying of the brick. Here the fireplace has a raised hearth and the heavy mantel

is supported by four substantial corbels, made in the same pattern as those supporting the ceiling beams, and in different parts of the exterior construction. The west wall of the room is broken by the broad landscape windows and the east wall by the series of French doors that lead to the brick-paved court without.

At the edge of the fireplace is a door leading into the library. This room is finished similarly to the living room. The book shelves are built in and the terra cotta brick fireplace has been made more interesting by inlaid blue and brown Moravian tiles.

The dining room, at the left of the living room, carries out the same ideas in regard to the woodwork and the cool, grey ceiling. The Sheraton furniture in mahogany is appropriately placed and corresponds to the brownish color of the woodwork. The prevailing color here is dull greens, accented more broadly in a line of tiles across the front of the fireplace.

In all of these lower rooms, the draperies are of a soft tan scrim bordered with an old rose and dull yellow flowered cretonne. This corresponds to the rose coloring used, especially in the living room, in the rugs, lamp-shade and cushions.

The most unique feature of the house is the court that is formed by the two rear wings of the house that extend on either side. The south wing is reserved for the three guest rooms and two baths, while the north wing is given over to the service part of the house and the garage.

These wings are called decks, and are used for sleeping porches and for out-of-door living rooms. They command glorious outlook over the country and take the place of the usual piazzas.



In front of the well-planned fireplace in this spacious living room is an interesting table and bench, carved by the owner of the house.

The court, thus formed by the wings, is paved with brick and is made most attractive with bushes of orange-colored berries and plants with purple blossoms. In the season the Gold of Ophir roses bloom and soften the lines of the brick. The large bas-relief of the "Swinging Boys," above the doorway leading into the living room, is creamy white, and in its simplicity makes a very successful combination of sculpture and architecture. The masterly execution shown in the varied manner of laying the bricks in this house is also apparent here.



Another view of the living room with a glimpse into dining room beyond.

The open work, shown in the parapet around the top of the decks is admirably constructed, and care is shown in the laying of the bricks on the wall surfaces. Often the ends of bricks painted a deep blue make a good decorative scheme. The garage, placed at the end of the north wing, makes a very good use of a part of the house and eliminates the unprepossessing garage that so frequently spoils the appearance of a rear yard.

Altogether the house answers the requisites of a successful dwelling.

In view of the sea and mountains, in a climate that is affable in summer and winter, it forms an ideal home for one who appreciates California.



Constructing a "Castlette"

Dwarfed Dwellings the Latest Creations of Thrifty Americans

Monroe Wooley

CASTLETTES are coming into vogue as suitable companions for kitchenettes and built-in conveniences. Incidentally, castlettes are designed to fit scant purses and to defeat the profits of the pay-as-you-can man. Cash and castlettes are chummy, and if you wish a cozy home, minus interest to cover deferred payments, all you need do is get the castlette craze.

In the past it has always been the custom of the people to build their houses as large as possible. The bigger the pocketbook the bigger the house, regardless of the size of the owner's family or the needs of the occupants. Hitherto houses have been built for show as well as for shelter. Castlettes are the opposite extreme. Dwarfed dwellings may be made as comfortable as compartment cars and suites *de luxe* afloat. The requirements are few: a few hundred dollars, ingenuity for designing, and a determination to be comfortable in close quarters.

The builder of a castlette living in the west has dubbed his admirable little architectural creation a "sort of a two-by-four sample of beaux arts craftsmanship." That explains the little dwelling in a nutshell. Like all grim old castles, the castlette is not much for looks from without. That is because the structures, the same as more pretentious homes, are built to live in. Its tiny size, perhaps, is its most startling feature.

It is the interior arrangement and



The house at the beginning.

equipment that fills the visitor used to big rooms with delight. It may so happen that a room of dry-goods box dimensions may have as much living space in it by resorting to built-in accessories as a room of town-hall measurements. If your taste is not all in your palate, then you can arrange a nine-by-nine cubbyhole to suit your living whims from every standpoint. It is a physical impossibility to be in more than one room at a time. Therefore, make them all small. This is the spirit of the conceiver of the castlette. The smaller the rooms, the smaller the house, and the smaller the house the less labor and material required. Then just think of the ground space saved for growing things that need oodles of room and earthly nourishment.



In an early stage of development.

Of course castlettes are not for families numbering their offspring as twins and triplets; but for childless couples, or those who have but one or two children, and for old people whose children have all married off, the new style in home building meets a real necessity. Castlettes save time, worry and expense in daily household drudgery. Less fuel is required to heat them, repair and repainting bills are less—in fact, there is but one true indictment against them. That's their size. To people who are always bigger than their homes the castlette offers no salvation.

A castlette has many novel features of interior construction. A lilliputian fireplace, say twenty-four inches square, of fancy pressed brick, is sufficient to heat small rooms. It may be double and rest between the wall of a living room and bedroom, having a fireplace opening in each room. Built-in recesses, covered with glass doors of fancy design, for books, chinaware, glassware and odd bric-a-bric, save space for small tables and chairs. Marble washbasins in the bed-



The finished "Castlette"—Total cost four hundred dollars.

rooms may be installed to fold into the wall when out of use, and clothes lockers may draw out from interior walls. In cool climates, where ice is little needed, a screened food safe may be built in the wall with an opening in the kitchen for taking out and putting in food supplies without going onto the porch, while the surface outside should be screened to let in pure, fresh air. All pots and pans and dishes find hiding places the same as they do in any kitchenette, and a table in the form of a wide, dressed board may be let down out of the kitchenette wall and be held in place by gilded chains. The hot-water heating boiler of the range or oil stove should find a resting place in the loft above the kitchenette. In a pure-bred castlette there is no diningette. A dining room is fit only to eat in and play billiards—and the owner of a castlette must pay toll over public tables to take part in the game.

Eternal vigilance must be practiced in furnishing a castlette. Too much furniture will spoil a dwarfed dwelling, and make the owner wish for something larger. Get what is needed, and stop at that. Don't buy beds and chairs and other things for the long-expected guests who never really come. If visitors do come get into them at the start the spirit of your experiment, and show them how resourceful you are in the face of odds by "hanging them on obliging nails." When they go home they will not soon forget what a novel experience they had, and maybe they will become castlette converts when the proper time comes.

The cost of castlettes depends on you and your environment. These cute little structures look fine sitting on a half-acre. Often the house may cost less than the land, much less. According to plan books sold by architects, ordinary houses run from five hundred dollars up. A

cottage shown at less than a thousand usually is not much of a house. Comfy castlettes run the other way down the scale. They cost from two hundred to five hundred dollars, and a prize-winner may be put up for the maximum figure. The little houses make for civic beauty in cities. An overgrown mansion on a cramped city lot looks like a prisoner in stocks.





"Castlettes" leave room on the small plot of ground for gardens, hot-houses, chicken coups and other money-saving institutions.

For the man who has had hatchet-and-saw experience, the building of a castlette will cost much less than if all the labor is hired. Little scaffolding is needed and after graduating from hen-house architecture, with the aid of a first-class mechanic, for saving's sake it is permissible and advisable to become a helper at castlette carpentry. Inside, the Mrs. may prove a big help tacking on wall-board and staining the woodwork.

Care should be had in designing the windows of the rooms to see that the ventilation will be adequate and properly distributed. A toy-palace does not completely fill a want unless it meets all the requirements of any other type of house in everything save the matter of size. As long as we are handicapped and yoked to city lots, in spite of the fact that a paternal government yet has land to deliberately give away, just so long will castlette construction be popular.

Small houses should go with small tracts of land. A big house on a little plot means that the owner is not producing anything for himself—that all he gets to eat comes from some one who has not hidden all his soil under floors and roofs. The castlette and a small tract of land, even though but a city lot, should be to the moderate wage-earner what the country estate is to the multi-millionaire. Unless a rich uncle has just bestowed on you what he could not take with him on a long journey, when you get ready to build just devote a little investigation to castlette construction and get away from the old folly of building to impress and please people who pass by. Keep the "love in a cottage lore" constantly before you.

How to Get "Comfort Efficiency" by Arrangement of Furniture

William Powell

NEARLY everyone likes to "change things around," if not to obtain a more livable and attractive looking room, why then just because we have an inherent desire to change our room or rooms every so often. The next time you change your belongings, do it with the idea of obtaining the greatest amount of "comfort efficiency" out of them. You can get this by possessing just one thing—taste. But I will divide this into taste for decoration and taste of arrangement. There are many articles and even books which tell you how to improve your rooms by redecorating, so let me tell you a few ways to improve them by arranging your furniture to best advantage.

I shall deal with the living room, which fortunately is taking the place of "parlors" and those stiff, uncomfortable little "reception rooms." Yes, even in large houses with many rooms you don't find each one labelled with such names as "the blue parlor" or "the Louis the Fourteenth Room." Most likely they are all just liv-



Comfort was the keynote in the placing of this room's furniture—a good reading lamp back of the comfortable chair, a roomy desk with good light by night and day, a couch with a broad window back of it, and a fine old chair by the hearth.

ing rooms—and this is a very optimistic sign for our modern method of living.

When you change your living room, look just at the furniture. Are all the chairs comfortable? Are they placed near a window, next to a reading light, or in groups conducive to easy conversation? If not, make them so. Remove the stiff, uncomfortable chairs. They are out of place in the living room. Place them in a bedroom, dining room, or hall—not that these places need uncomfortable furniture, but they can stand a certain amount of "stiff" furniture. Next, don't have your chairs so placed that they become cluttered up in the center of a room. Of course, this is most likely to happen in a small room where the furniture cannot be divided into groups, but by manipulating it wisely you can avoid this bad feature. Try placing your chairs around or next to a table. On this table you will have a reading lamp, books kept together by racks, magazines in neat, overlapping piles, and maybe a vase, or framed photograph. While we are on this subject, let me urge you not to put too much on your tables—don't allow magazines or books to pile up and don't have bric-a-brac around. I mean the useless little ornaments, statues, etc. They detract from the restfulness and good appearance of the room and are not found in houses of best taste. Of course, a collection of porcelain, bronze, or valuable curios is a different proposition, and they are nearly always put together on one table, cabinet, or mantel. This "keeping together"



This room would be more comfortable—and attractive—if the couch next to the door had been set either before the fireplace or at its side, right-angled to the wall, and with one of the morris chairs drawn up to the reading table, don't you think the room would be more inviting?

of things is really the secret of a neat room. I have already urged you to apply it to your books and magazines, but I might add that you follow it out in your framed photographs. Put them all on one table and they will look all right. Many people are returning to the "family album" idea because they realize the bad effect of having so many photographs to



The unsightly circle of chairs which results when the furniture is carelessly placed.

break up wall space and litter up mantels and tables.

Carry out this collecting idea if you have a smoker in the house. Put his pipes, cigar box, humidor, matches, ash receiver and all the other paraphernalia of Lady Nicotine on one table, if possible a small low table next to his favorite reading chair.

This leads me to another point in regard to livable rooms. Have you ever stopped to analyze why certain rooms are livable while others seem most un-homelike? If you have given thought to this subject, you will find that the money spent in the decorating and furnishing of the room had little to do with its livability or attractiveness. We all know those rooms which fairly scream money the moment you get a glimpse through the entrance, but which would be the last place we would seek for real comfort and cheer. Of course one can produce a more attractive room if one has money to spend on it, but the point I want to drive home is that money is not essential to a room's livability or even to its attractiveness.

Some rooms which may be chuck full of expensive furnishings seem dead, with no individuality to them. The other day I was in a room—and one very simply furnished—which fairly radiated good cheer and life. On analyzing why this

was so, I discovered that one of the greatest promoters of this room's individuality was its collection of plants and flowers —and its canary! They were living things. They made you feel that the owner cared for something more than mere furniture and upholsterings; that he had an interesting personality. Try using more potted plants and bulbs in your room. If you have a nice broad window, or better still, a bay, place them on one wide table, hang them from the top of the window and let a canary sing in their midst. You will possess the joys of a miniature conservatory and have a breath of summer even in the coldest night of winter. What's more, you will have made one more step towards "comfort efficiency."

I have wandered away from the placing of the furniture, so next to the arrangement of your chairs in the most useful way, let's look at your couch or sofa. Very likely it is up against a wall, and this is often a very good position for it. But if you want a change, there are several other very good ways of placing your sofa. For instance, if your room is large enough, it is always an ideal arrangement to place the couch in front of a fireplace and have a table directly back of it. Put a lamp on the table and you will know what solid comfort really is when curled up on the sofa, with the fire crackling (even a gas grate can fill you with romance if a little imagination is used), a good book in your hand and a fine light at your back. If your space won't allow you to have a couch before the fireplace, place it at one side, letting it come out at right angles to the wall. This position will be found almost as comfortable as the other, but a light should be at the back or end of the couch. In fact, you should remember this no matter where you place your couch—it is just little things such as these, lamps where they are most useful, tables next to chairs, foot-stools, etc., that make up a comfortable, and also an attractive, room.

If you haven't a desk in your living room, put one there if possible. It will add greatly to the room's usefulness and comfort. What's more, with a desk in the room, you will find that you will accomplish more of the writing you have to do, and your correspondence will not seem such a drudgery. Probably you have an old desk in a bedroom or even the attic which would never occur to you as suitable for your living room, but you can paint or stain it to match the predominating paint or stain already in your living room. Do likewise with one of the stiff little chairs which I told you to take out of the room—of course you must retain one if you have a desk in the room. Put the desk near a window so that you will get good light by day, and you should have a small but good lamp on the desk, or a standing lamp next to it.

The suggestions I have given for a living room apply equally as well to a den or boudoir. There is not much chance for changing the furniture in a dining room; it must necessarily have the table in the center, chairs (next to wall), sideboard and china closets. The same is true of bedrooms — the nature of the furniture does not allow one much choice.

When you are next seized with the "change fever" try to bear in mind a few of my suggestions, and I am sure you will be surprised at the increased pleasure and comfort which your room will afford.

Picturesque Porches and Seats of Modern Homes

John S. Edmund

THE first impression which we receive upon approaching a building is usually the most lasting. As one approaches a house there is perhaps no other feature which attracts our attention as soon as does the porch and its furnishings. It need not be elaborate in design to give a pleasing first impression, neither need it be expensive in construction or furnishings in order to make it charming. The simple ones are often the most picturesque and interesting. A simple porch, especially when fitted up with useful furniture, forms frequently the most homelike and pleasing entrance to any home or like building. What is more to be desired than a look of hospitality and welcome as we enter a home that will produce a lasting impression? It is often said that the character of the porch is the personality of the owner.

There are many kinds of pretty porch seats that are distinctive on account of the plainness and simplicity of their design, and harmonize most wonderfully with the environment. There is a charm that these seats give to the house and surroundings that cannot be equalled by either porch railing or flower boxes. It is not always advisable to have chairs or settees from the house left upon the porch for only furniture of extremely good construction can withstand to any degree the rain, wind or dust, and it is for this reason that seats which



An attractive porch made picturesque by the vines and flowers which form a bower over one on the seats.



A simple porch of much character made attractive by the use of seats and swinging lamps.



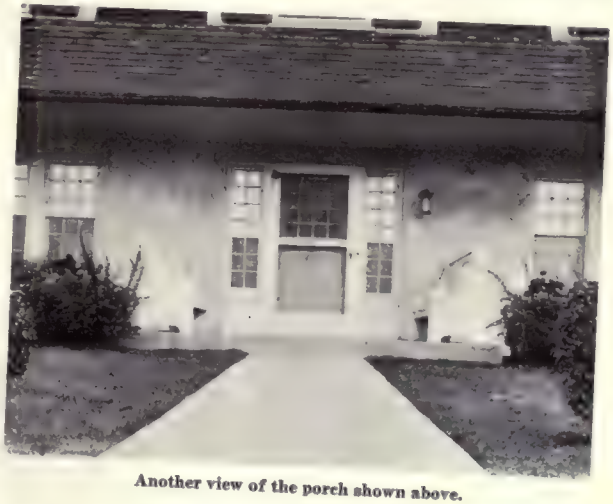
Simple cement porch with seats arranged at either side; abundance of green adding to picturesqueness.

are built in place or, in other words, are a part of the construction of the house, are much to be preferred.

The first illustration shows the porch of a home in Hackensack, N. J. The porch is sheltered with a hood supported by brackets, and a seat is arranged at either side of the porch. The one seat is covered with vines which form a canopy over the same. The seats and woodwork of the hood are stained a dark brown which harmonizes beautifully with the surroundings. The walls of the house are of cement construction, and the walk from the sidewalk to porch is of red brick.

The porch shown in illustration number two is located at Maywood, N. J. The roof is covered with shingles as shown in picture, and supported by two large cement columns from which two lanterns swing. The floor is constructed of brick raised two steps above the grade. High-backed white wooden seats are built in at both sides of the porch.

The next porch shown, two views of which are given, is the most simple in construction. The covering of the porch is formed by the projection of the main roof of the house. The floor of the porch is of concrete, as is the walk which leads to the same. A white wooden seat is arranged at either side. The walls of the house are of stucco and tile construction.



Another view of the porch shown above.



An attractive seat arranged between porch columns.

It will be noted in the pictures that flower boxes are arranged at various windows of the houses which harmonize most prettily with the surroundings, and help to set off the house.

A Most Home-Like Brick and Cement Residence

Bertha H. Luck

THIS home is situated in the residence district overlooking Lake Calhoun, one of the many beautiful lakes for which Minneapolis is famous. A study of the picture showing the beautiful vines and shrubbery which add so much to the attractiveness of the exterior, at once makes apparent the owner's interest and love of home.

A dark red glazed brick is used for the first story, above which runs a belt course and stucco, with half timber treatment, for second story and gables. The stucco is left natural cement color, the trim being dark brown. A brick walk, which cannot be seen in the illustration, leads up from gate posts of brick and stucco, to the small entrance porch at the right and around the house to rear porch. We pass through a vestibule into reception hall which has built-in window seat and coat closet, with lavatory, under stairway. A paneled wainscot about four feet high, stairway and other woodwork is in dark weathered quarter sawed oak. The walls have been papered a dark ecru, which makes a very pleasing combination with the dark finish.

The living room is a large, beautiful room, its main features of attraction being the brick fireplace and the group of three windows with window seat, on



The beautiful vine-covered home of Mr. E. Atwood, Minneapolis, Minn.

either side of which have been built bookcases. The same dark oak finish is used in this room, as well as in the dining room, and the walls in these two rooms are papered in drab, making an excellent background for the several paintings in dark frames. Dainty scrim curtains add to the sunny cheerfulness of this room and, since this photograph was taken, the organ has been removed and a piano occupies its place, which very much improves the appearance of the room.

There is a large arched opening from living room into dining room. A brick fireplace and paneled wainscot make this room very attractive and it is beautifully furnished with mahogany dining room furniture. French doors give access to sun room, with red tile flooring and white woodwork; furniture being wicker, painted white. This sun room is ideally located, overlooking the beautiful lake.

On the second floor there are three bed rooms with sleeping porch at the rear. The owner's chamber is a large, sunny room, extending across the entire front of the second floor, with bath adjoining. This room is very attractively finished in white enamel with white tile fireplace and walls papered with light gray. The other two rooms are also finished in white enamel and French doors lead from them to sleeping porch just over sun parlor. There is another bath room at the rear on this floor.

There are many features to this house which are most pleasing and nothing which contributes to its attractiveness and comfort to the owner seems to have been overlooked.



The large living room with fireplace and group of three windows and window seat opposite.

A Planting Plan for a Double Yard

Wyman P. Harper, Landscape Architect

FRIENDS or relatives sometimes build with their houses adjacent and related, the lot of one merging into the lot of the other. The planting plan given illustrates such a case. Granting such a house construction as the plan indicates, the plant beds can be staked from the plan, the beds dug, the plants ordered and planted by the owners themselves.

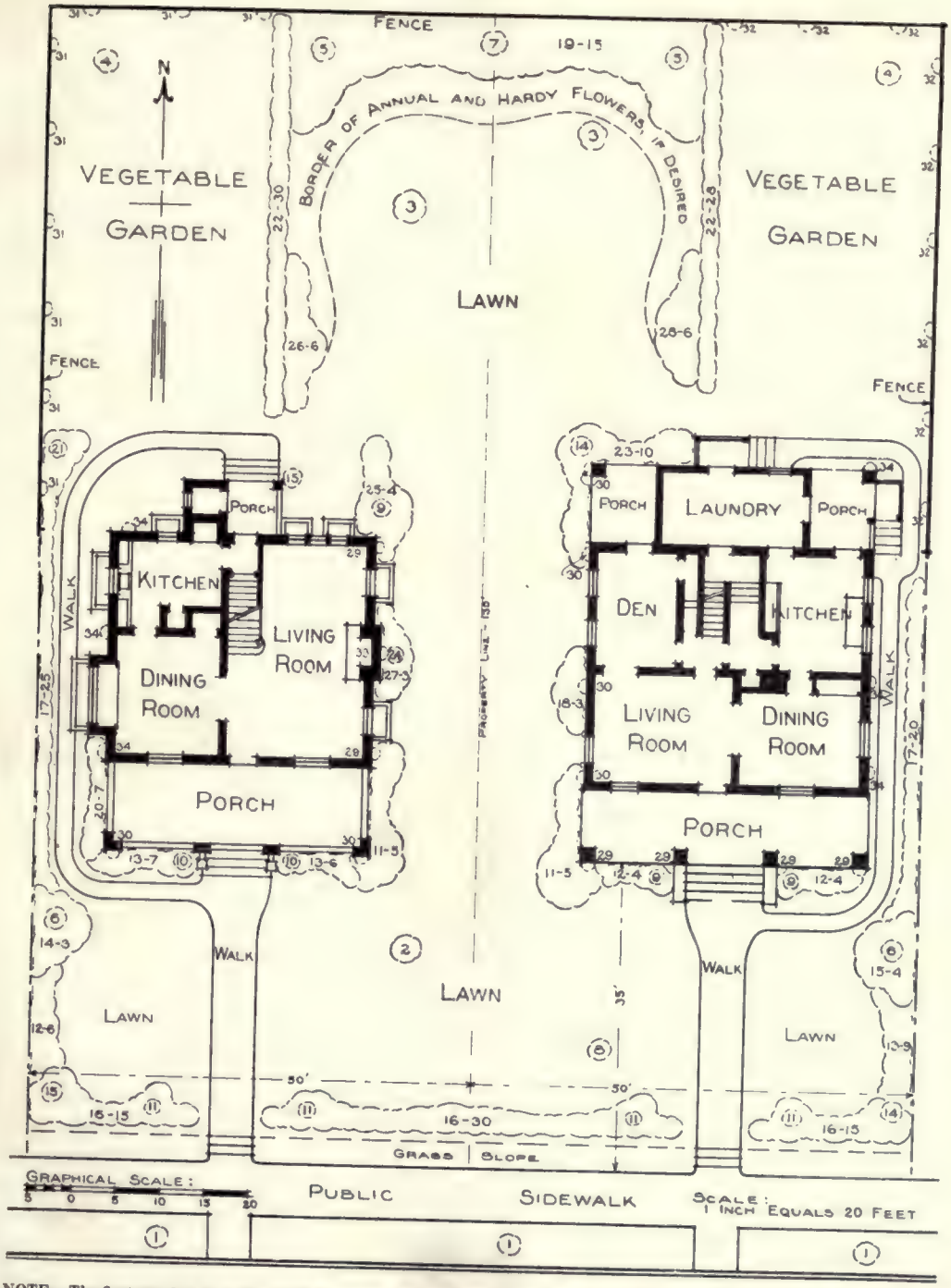
The value of a common yard to two or more houses is that so far as the views from each are concerned the yard space is doubled, and the actual improvement more than doubled. This is practicable only when there is a relation between the house plans such as is shown and the best rooms of each open out on the larger common open space.

The prime essential of such an arrangement is that the central area shall be absolutely open and common to both parties and bordered with shrubbery so that the view from either house shall be stopped in an agreeable way, no matter on which lot the shrubbery is. Most of the time one owner will be planting for the benefit of the other, and both lots arranged as if there were but one planting. This is not only true at the front but quite as much so at the rear. In fact the benefit to the rear portion of the lots is greater than at the front. Each rear space in itself would be comparatively small if a vegetable garden had to be provided at the same time, but by doubling the size one more than doubles the effect.

There is another feature embodied in this plan that has not appeared in the plans of this series previously published. A yard is frequently elevated above the street so that there is left a bank and short slope next the public sidewalk. When the house is set far enough back this permits the planting of a hedge or



Planting a double lot offers opportunities for making much of small lots.



NOTE.—The first number in a plant bed indicates the kind of plant. The second number in a plant bed indicates the quantity of that kind needed to fill the space. Circles represent individual plants, half-circles represent vines. For planting list see following page.

Planting List

1. American Elm (Ulmus Americana), three plants.
2. Hackberry (Celtis occidentalis), one plant.
3. Sugar Maple (Acer saccharum), or (St. Louis and south) Tulip Tree (Liriodendron tulipifera), two plants.
4. Apple, two plants.
5. Tree Lilac (Syringa Japonica), two plants.
6. Mountain Ash (Sorbus aucuparia or S. Americana or S. quercifolia), two plants.
7. Bolleana Poplar (Populus Bolleana), one plant.
8. Catalpa (Catalpa speciosa), or (St. Louis and south) Kentucky Coffee Tree (Gymnocladus Canadensis), one plant.
9. Siberian Pea (Caragana arborescens), or (St. Louis and south) Hydrangea (Hydrangea P. G.), three plants.
10. Sweet Brier Rose (Rosa rubiginosa), two plants.
11. Bridal Wreath (Spiraea Van Houttei), fourteen plants, 4 feet apart.
12. Japanese Rose (Rosa rugosa), fourteen plants, 2½ feet apart.
13. Snow Garland (Spiraea arguta), or (St. Louis and South), Mahonia (Berberis aquifolia), twenty-two plants, 2 feet apart.
14. Persian or Rouen Lilac (Syringa Persica or Chinensis), five plants, 4 feet apart.
15. Tartarian Honeysuckle (Lonicera Tatarica), six plants, 4 feet apart.
16. Japanese Barberry (Berberis Thunbergi), sixty plants, 2 feet apart.
17. Wild Rose (Rosa Arkansana), forty-five plants, 2 feet apart.
18. Weigela (Diervilla rosea), three plants, 3 feet apart.
19. Lilacs in variety, fifteen plants, 5 feet apart.
    Common Lilac (Syringa vulgaris), five plants.
    Common White Lilac (Syringa vulgaris alba), five plants.
    Hungarian Lilac (Syringa Josikaea), five plants.
20. Indian Currant (Symphoricarpus vulgaris), seven plants, 2 feet apart.
21. Mock Orange (Philadelphus coronarius), or Deutzia (Deutzia crenata fl. pl.), one plant.
22. Hedge Cranberry (Viburnum Opulus), or (St. Louis and south) California Privet (Ligustrum ovalifolium), fifty-eight plants, 1½ feet apart.
23. Snowberry (Symphoricarpus racemosus), ten plants, 3 feet apart.
24. Russian Olive (Eleagnus angustifolia), one plant.
25. Siberian Dogwood (Cornus Sibirica), or (St. Louis and south) Rhodotypus (Rhodotypus kerrioides), four plants, 4 feet apart.
26. Cut leaved Elder (Sambucus laciniata), six plants, 3 feet apart.
27. Ash leaved Spirea (Sorbaria sorbifolia), three plants, 3 feet apart.
28. Cut leaved Sumac (Rhus typhina laciniata), or (St. Louis and south) Weeping Forsythia (Forsythia suspensa), six plants, 3 feet apart.
29. Climbing Honeysuckle (Lonicera sempervirens), or (St. Louis and south) Akebia (Akebia quinnata), six plants.
30. Japanese Clematis (Clematis paniculata), or (St. Louis and south) Purple Clematis (Clematis Jackmanni), six plants.
31. Wild Grape (Vitis riparia), nine plants.
32. Woodbine (Ampelopsis quinquefolia), or (St. Louis and south) Wistaria (Wistaria Chinensis), nine plants.
33. Engelmann's Woodbine (Ampelopsis Engelmanni), or (St. Louis and south) Boston Ivy (Ampelopsis Veitchii), one plant.
34. Bitter Sweet (Celastrus scandens), or (St. Louis and south) Actinidia (Actinidia arguta), six plants.

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similar growth at the top of the slope. The advantage of such a hedge is that as one looks out from a front window toward the street, as we saw last month, unless there is an interesting object to catch the view and draw the eye from looking across the pavement, the ugliness of the latter is apparent. Such a hedge as is indicated is not uncommon and performs that duty without concealing passing objects in the street that most people like to see or unduly concealing one's self. There is a completeness to the planting also that is satisfying. Just as one wants a high planting at the back for a background, so the front planting when one does not want actual concealment is better if it is low.

There is another feature in the plan well to understand. It will be noted that the front irregular hedge is interrupted in places by taller plants placed in its midst. That is to give variety of sky line, and is more interesting than if flat and monotonous. Any shrubbery border is better if such an insertion is made occasionally. If a low border, a larger shrub may be inserted; if the border is already high, a low tree like the mountain ash can be used for an accent point, while

the Lombardy and Bolleana poplars are sometimes used among trees for the same purpose.

The largeness of the lawn space here compared with the other plans of the series leads one to dwell upon how much we are favored in this temperate zone by our ability to use grass for a ground cover as other latitudes cannot. A smooth green lawn is the most beautiful thing in yard decoration, and occupies no space needed otherwise, for it likes to be walked on. Just as the beauty of a lake is smoothness of its surface, so is the beauty of a lawn for the same reason, because the eye delights in such a surface. Once it is broken, its charm is gone and those gardeners who like to plant their shrubbery by dotting it about so that each plant is seen individually at the expense of the open lawn space are only defeating their own efforts by destroying in fact that which is most beautiful of the elements they are working with. The trees and shrubbery are appendages to the lawn and essential to its best appearance, but so long as ground space is needed for use as well as ornament, the type of landscape best adapted to yard decoration is that whose leading feature is a smooth, unbroken grassy space. Even then the shrubbery does not want to be so scattered as to seem other than as a mass. Just as a lawn should be a unit, so shrubbery is best the least number of masses that can conveniently be made of it in appearance.

Estimate of Cost.

COST OF PLANTS:		
6 large growing trees, at $2	$12.00	
6 small growing trees, at $1	6.00	
266 shrubs and vines at 25c	66.50	
10 per cent additional for freight and packing charged extra	8.45	92.95
COST OF PREPARATION OF SOIL:		
(Omitting cost of extra black earth and clay if needed.)		
1 man digging 3,000 sq. ft. plant beds 12 days, at $2 per day	$24.00	
1 man planting trees and shrubbery 4 days, at $2 per day	8.00	$32.00
		$124.95

While the soil for a lawn may be shallow, it is only so at an expense for a larger amount of water required for maintenance than would necessarily be otherwise. If the soil is prepared a foot deep with the same care as was specified for plant beds in the February number and if it is raked to a smooth, mellow surface, sown with the best grass seed obtainable which has the Kentucky blue grass as its largest and most permanent constituent, if it is rolled with a light roller and receives a reasonable amount of water, a permanent lawn should result, always requiring some water in dry seasons and some other attentions, but not needing the continual nursing that a poorly prepared lawn demands.

The form of a lawn need not necessarily be flat. It is interesting if more curving, always permitting the water to flow from it freely. On a small yard the opportunity for making much variety of surface is small, though with the accompanying plan the middle yard can drop at the center several inches to the advantage of both appearance and drainage, while with a much larger yard the variety of surface possible and practicable is known and appreciated only by those who like it and try it.

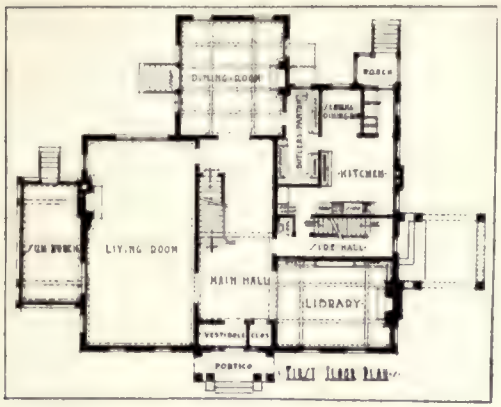
A Group of Brick Colonial Homes

THE brick Colonial is a type of residence design always satisfying. The first home of this trio group, designed by William Channing Whitney, is a beautiful example of the pure Colonial spirit, where every architectural detail is well executed. This is very clearly shown by the picture, and is equally true of the interior work. The house is of generous size with a broad central hall running from the front entrance and opening at the back through French doors into a beautiful dining room, some 20 feet square. The ceiling of this room is curved and it is finished in white and mahogany. The fireplace mantel is designed in the pure Colonial. The ceiling is beamed.

The living room takes up a third of the ground plan proper, having a width of 20 feet and a depth of 38 feet. At the back of this room near the fireplace there is a group of casement windows, through which one looks out upon the beautiful green lawn. To the side of the room is a sun-porch with cement floor and interior trim of birch stained mahogany. This living room is finished all in white enamel. The main hall is finished in mahogany, in keeping with the finish of the dining room. The right side of the house is taken up



Residence of Mr. W. S. Dwinnell, Minneapolis. Designed by William Channing Whitney, Architect.



First floor plan of Dwinnell residence.

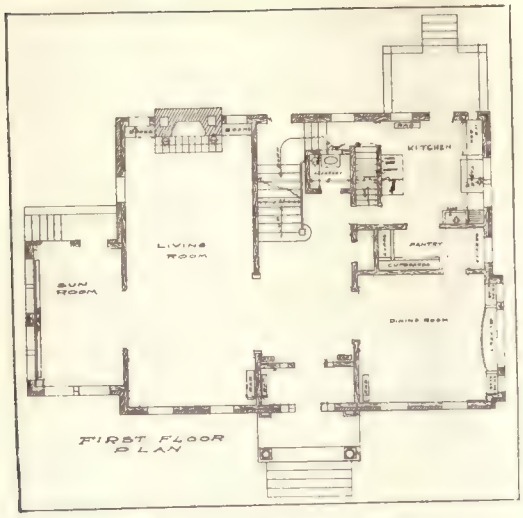
with the library in front, which is finished in black walnut, and back of this room is the service portion of the house, side hall, kitchen, servants' dining room, pantry, etc., all very cleverly arranged in connection with the dining room through butler's pantry. This portion of the house is finished in birch left in the natural shade. The second floor is devoted to five splendid sleeping rooms with an elegant sunroom or sleeping porch over the main dining room. The third floor contains a large billiard room, and servants' sleeping quarters.

The porte-cochere is on the north, and the driveway leads to the garage, which is located under the dining room.

The next home is a pleasing type of the gambrel roof Colonial residence, not quite as pretentious as the first house described. The entrance to this home is into a large Colonial hall, which is finished in white enamel. The stair treads and rail are in mahogany finish. The living room which, in this house also, occupies the entire south side with fireplace and bookcases at one end, is finished in solid mahogany, with a very elaborate fireplace of tile in the color of mahogany; the ceiling is coved. One of the features is the treatment of the four large French doors opening upon the sunroom. These doors fold back like a curtain. The



Residence of Mr. William S. Jones, Minneapolis. Designed by Irwin S. Goldstein, Architect.



First floor plan of the Jones residence.

lighting fixtures are unique in design, strictly carrying out the Colonial idea.

The dining room, which is to the front on the other side, is finished in quarter sawn oak, finished in early English. The owner of this home has a beautiful set of oak furniture finished the same. At one side of this room is a large built-in buffet with china closets on each side. The service portion of the house is finished in soft wood, enameled.

The second floor has four chambers, two bathrooms with tile wainscot and finished in white enamel. There are also four rooms and a maid's room on the third floor. One of the four rooms is used as a private library and contains built-in book shelves. There is also on the same floor a clothes room which has been finished in Tennessee cedar.

The driveway is to the south, leading to the garage at the rear.

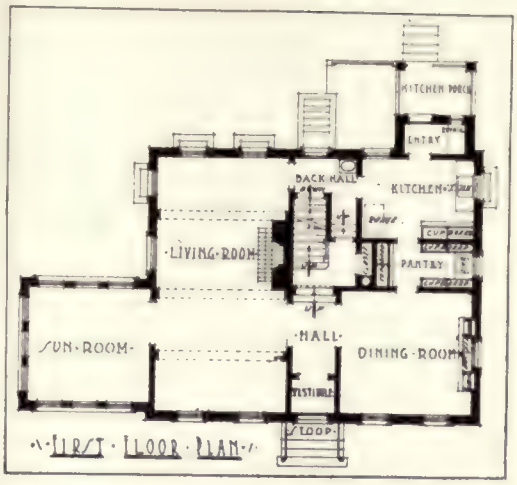
It will be noted that this group of three brick houses is of similar design, all having the gambrel roof. The third and last illustration is of a somewhat smaller house than the two preceding and the lighting of the third floor is entirely secured at the ends of the house, the roof being free of dorm-



Residence of Mr. James C. Hazlett, Minneapolis. Designed by Jackson & Stone, Architects.

ers. In this home the owner wished to have a fine large sun bedroom or sleeping porch with windows on all sides and a sunroom was built out from the main house and carried up to provide the much desired enclosed sleeping porch. The entrance of this home is into a short hall. The dining room to the right is finished in red oak. The living room of this house, like in the preceding home, is also to the south, occupying the entire left side. This room is 15 feet wide. It is finished in birch, mahogany. The sunroom, opening off from the living room through French doors, is finished in fir. There are four bedrooms on the second floor with also the large sleeping porch, mention of which has already been made. The second floor is all finished in white enamel. On the third floor there are two rooms and maid's toilet.

The basement contains besides the steam heating plant, fuel room, vegetable room and laundry, a childrens' playroom, very



First floor plan of the Hazlett residence.

nicely finished and light and airy. The garage, as will be noticed from the picture, is also of brick construction, designed in keeping with the house. It is a large garage, 20 feet square, with double doors and capacity for three machines.

A Suburban Residence

THE delight of owning your own home is increased if that home has generous grounds surrounding it, getting away from the cramped restrictions of a fifty-foot city lot, where there is room to build a pergola and the grounds are a real and important feature of the home. Consideration of the family's health and that of the busy business man particularly, is an influencing matter in the selection of the home site. If you live in the suburbs, you cannot step from the office to a street car and off at your front door. Either you get an exhilarating ride of several miles in an automobile or are required to walk several blocks from the car to your home. Suburban home life is naturally more of an outdoor life and that is of course healthier.

In selecting your site, it is always desirable to get into a suburb where there are building restrictions necessary to a well-balanced and good community, where the value of your property is not lessened by the building of a cheap cottage right alongside and where the possibility of flat buildings or stores is of course eliminated. Building restrictions keep the district uniformly peopled with a congenial class and make suburban life more desirable.

There are innumerable types of the suburban residence and for your consideration we give you a very attractive English house. In this design we have a

combination of brick and cement with half timbers in the gables, and this, with the thatched roof, gives an interesting study. The broadway of the house calls for a front of 57 feet, including the porte-cochere.

The front entrance is on the broadway side, opening onto a terrace, the only covering of which would be the clinging vines. One end of this terrace is covered by an attractive English gable extended out and supported by two large piers. The large vestibule contains a built-in seat with hinged lid. The plan of the center hall type has an attractive stairway to the second floor, at the left. To the right is a columned opening separating the hall and living room. Directly opposite is a massive brick fireplace, the brickwork having been carried up to the ceiling. A pair of French doors open onto a large sun porch which is fitted with casement sash.

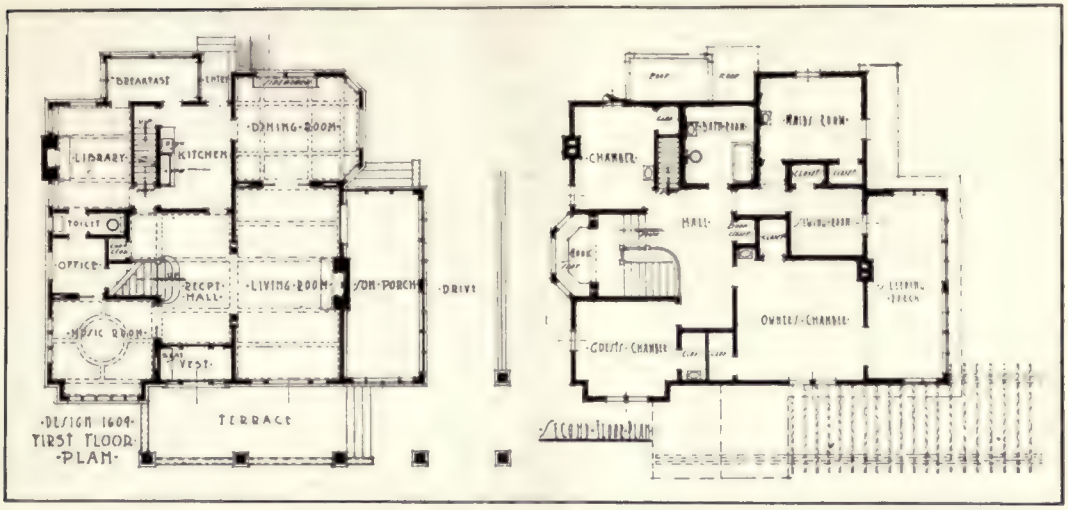
Sliding doors are used in the opening between living and dining rooms. This latter room is unusually attractive with its wide bay window on the end and its grouping of high casement sash over the sideboard at the rear. To the left of the hall and closed off from the balance of the rooms is a fair sized music room. Here again the room is made further attractive by a projected bay in front with its grouping of casement sash. The small space under the main stair landing the owner desired to use as a small private office and between this and the library is a toilet. The library contains a fireplace with built-in bookcases.



A combination of brick and cement with half timbers in the gables and with thatched roof.

These rooms all have beam ceilings; the dining room has paneled wainscot and plate rail. The floors throughout these rooms are of white quarter sawed oak. The finish in the hall and dining room is birch, stained mahogany, while the finish in the dining room, music room and library is of white quarter sawed oak, fumed. The kitchen is small—of the kitchenette type. Here just enough space has been allowed for range, sink, built-in cupboard, and clothes chute. This room is finished in birch, white enameled, with a tile floor. A French door off kitchen opens onto a breakfast porch.

The main stairs lead up to a spacious



landing where a projected bay with built-in seat makes an ideal "nook." On the second floor four good sized chambers, sewing room and bath have been finished off, together with a large sleeping porch over the sun room. This, too, is fitted with casement sash and screens.

The owner's room over the living-room has two good closets; a recess contains a lavatory. French doors open onto sleeping porch. This room has birch finish, stained mahogany. The guest's room has a large front bay, a good closet with lavatory, and is finished in birch for white enamel with doors stained mahogany. The rear bedroom is finished in fir, natural, and has lavatory. The maid's room has a lavatory and is finished in birch, white enamel. Sewing room in birch, stained mahogany.

There is a fine bathroom, with recessed tub and pedestal lavatory, tile floor and wainscot, built-in cupboard and medicine cabinet and clothes chute leading to the laundry.

No attic; the large basement provides ample storage space and has large laundry, fruit and vegetable room, drying room and furnace room for a large sized hot water boiler. The basement walls and floor are of concrete, laundry floor laid to drain. Lage size cistern, basement walls and ceiling plastered.

The exterior materials used are Golden Mottled Matt brick up to first story sills. The terrace floor is of smooth cement with brick border. A cream or tan cement plaster is used and the roof shingles stained a brown.

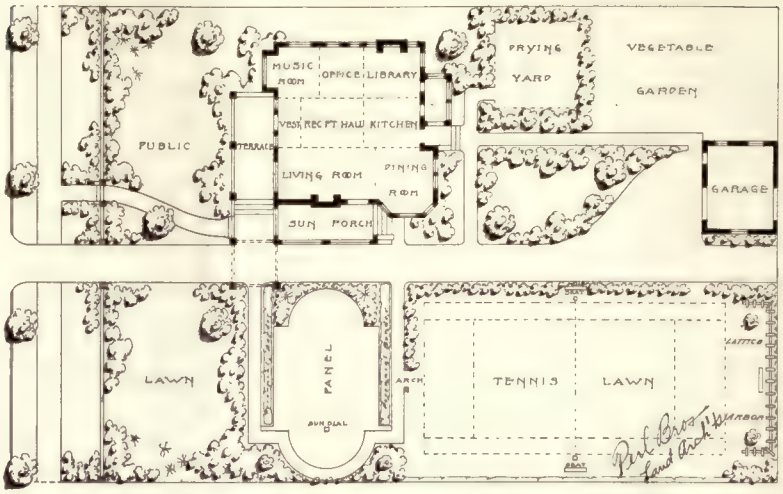
The house should be built for $10,000, exclusive of heating. This cost might this year be reduced owing to favorable building conditions, and you would have a suburban home which would be a credit to any community.

THE LANDSCAPE DESIGN.

The first essential in the adornment of a home area is the formation of a suitable plan. In the making of this plan, the principal things to consider are the size of the area, the amount which the owner feels able to expend for the purpose, climatic conditions, the soil, exposure, general character of the site, and the style of architecture of the house.

The above designed house has been located upon a suburban site of 150x175 feet, the only controlling features being those on the site itself. An existing tree standing on a slight knoll and directly in front of the main entrance, necessitates and is the reason for the curved walk. A low wall extends the entire width of the property ten feet from the sidewalk.

A straight drive leads through the porte-cochere to the garage, before which is a turn and at the side an exit to the alley.



Designed by Perl Bros., Landscape Architects.

The garden and pleasure grounds have been located in direct connection with the living portion of the house. The formal area is a panel treatment placed in the axis of the living room, and is entered by paths which lead from the front and side entrances. In the semi-circle of the same, a sun dial adds interest to that portion of the garden. On the cross axis of the formal area, a large extensive lawn has been designed to be used as a tennis and game lawn. Informal planting lines the boundaries of the lawn, and an inexpensive trellis and lattice work make an interesting background.

The service portion of the grounds is screened by the use of tall shrubbery. The drying yard and vegetable garden are easily reached from the kitchen.

A Brick Colonial Residence

THIS is a home that has been carefully studied and no expense has been spared to make this a really high class home where everything is of the best. How dignified and substantial this home really is with its large, stately colonial columns in the center supporting a pediment that forms a roof over the center of the second story balcony. The large brick porch with cement floor and massive buttress and brick steps gives that substantial look without having further knowledge of the materials used in its construction.

This house is not fireproof, but could easily be made so at a very small expense. The exterior walls are of hollow tile faced with a good grade of colonial brick; the roof is of slate.

The entrance is to the right into a reception hall, containing a large coat closet and the colonial staircase, with mahogany stained treads, white risers, and a mahogany hand rail. A wide columned opening separates the reception hall and the living room, which contains a large colonial fireplace and bookcases built in. To the other side of the room, directly opposite the staircase, are French doors with side lights opening onto an attractive sun porch with its casement sash and Rookwood tile floor. Opposite the fireplace, French doors open onto the front porch. French doors are also used



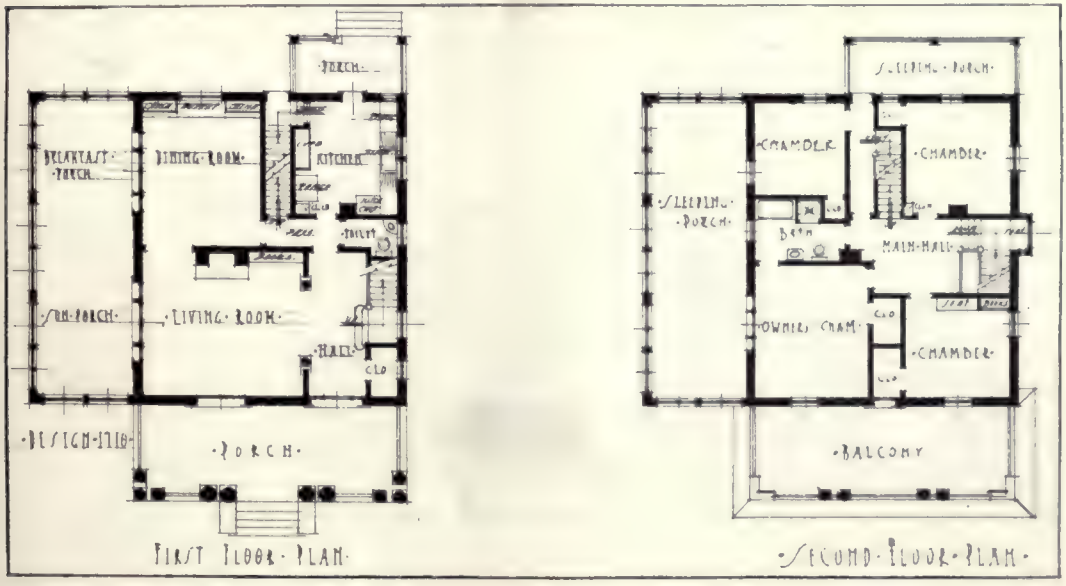
A dignified and substantial home.

in the opening between the living and dining rooms.

In the latter room there is built in a large colonial buffet and china closets across the entire end. There is no pantry, the kitchen being equipped with plenty of cupboards, work table, and built-in refrigerator, which is iced from the rear porch.

There is a toilet under the main stairs, easily accessible from either the front or rear portion of the house.

On the second floor are four large chambers, bath and sleeping porch, the servants' quarters being finished off on the third floor, where two chambers and an additional toilet have been provided together with a large billiard room.



The interior finish is purely colonial, in keeping with the exterior treatment; all finish being white enameled with mahogany veneered doors. All baths and toilets have tile floors and wainscots. The doors have cut glass knobs and the closet doors are provided with full bevelled plate glass mirrors. The electric wiring is complete, to include a vacuum cleaner, as well as sufficient outlets for table lamps and various electrical appliances.

The foundation walls are of concrete, waterproofed with waterproofing compound. Basement is partitioned off and plastered, providing for large vegetable room, laundry, toilet, storage, fuel and furnace rooms.

A Substantial Western Bungalow

THE accompanying photograph and plan illustrate a six-room home, which aptly typifies the individuality obtainable in the bungalow.

The exterior is most pleasing. The rough brickwork belt carried across the front and returning on the side to the end of the terrace, with the massive piers at the porch corners and the well proportioned chimney, give an air of stability and richness to the whole structure. The rather pretentious design of the projecting portion of the living room is perhaps somewhat out of keeping with the frank treatment of the porch gable and that of the breakfast room; but the theme is skillfully handled as to detail, and is at least original.

The plan is well worked out with an evident purpose of separating the kitchen, bath and sleeping rooms from the living rooms, without any sacrifice of accessibility; an accomplishment often difficult to obtain in a one-story dwelling. It will be seen at a glance how readily this arrangement adapts itself to those entertainments which any family, at times, is called upon to give. Even dancing can be attempted in this house, the terrace lending itself admirably as a promenade and breathing place.

Entrance from the porch is into an unusually large reception hall. Across one end of this hall extends a fixed seat with a hinged top, which upon being raised, discloses a handy and roomy box, useful for all sorts of things. From this seat a pretty vista is had through the wide square columned arch into the living room, with its massive fireplace in a cozy niche at the far end.



The brick work on porch and belt course add much to the beauty of this bungalow. Jud Yoho, Arehitect.

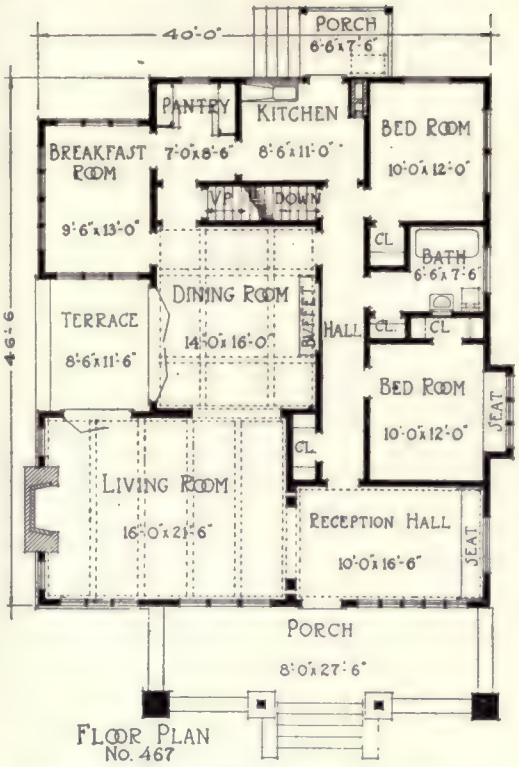
The woodwork of the interior of the living room is done in white, a somewhat unusual and not unpleasing contrast and panelling effect being obtained by finishing certain border mouldings and the doors and window sash in mahogany.

Around the room is carried a panelled base, two feet in height. The ceiling is beamed. On either side of the ceramic tile mantel breast, just above the seats, small bookcases are built in the wall. Oak flooring is used in the living, dining and breakfast rooms; fir flooring elsewhere.

A high panelled wainscot with plate rail is used in the dining room, and a conventionalized floral frieze is carried around the room at the ceiling.

The breakfast room, conveniently located adjacent to the kitchen and pantry, yet accessible from the dining room, and provided with ample windows on three sides, is a happy feature. A closet for wraps, convenient to reception hall, yet removed from view, one for linen and one for each of the bedrooms, are conveniently worked out; and finally the seclusion of the bath and toilet is a commendable feature.

A trunk and storage room and servants' rooms are finished off in the attic. In the basement, which is excavated under the rear portion of the building only, are located laundry, storage and fuel rooms; also the hot air furnace.



FLOOR PLAN
No. 467

The cost of this house, as estimated by the architect, is approximately $4,000.

An English Design in Brick

IN this design we have another plan of the central hall type on a much smaller scale, the entrance in the center under the bracketed hood. The exterior, while very simple, is very attractive, with walls of hollow tile faced with brick, and rough cast cement plaster in the gables with half timber work. The roof is shingled.

The rooms in this plan, while small, are very well arranged, there being little or no waste room caused by long halls. Besides the living room with brick fireplace, space has been taken off the right side to provide a small "den." If desired, this could be thrown into one large living room, and if this were done it would be advisable to place the fireplace at the end, for if left at the side it would tend to make the room too narrow for the length. The sun porch is fitted with casement sash, hinged to open in.

The kitchen is fitted with built-in fixtures, or, if desired, the space marked off for toilet opening off kitchen could be used for a pantry. There is a small



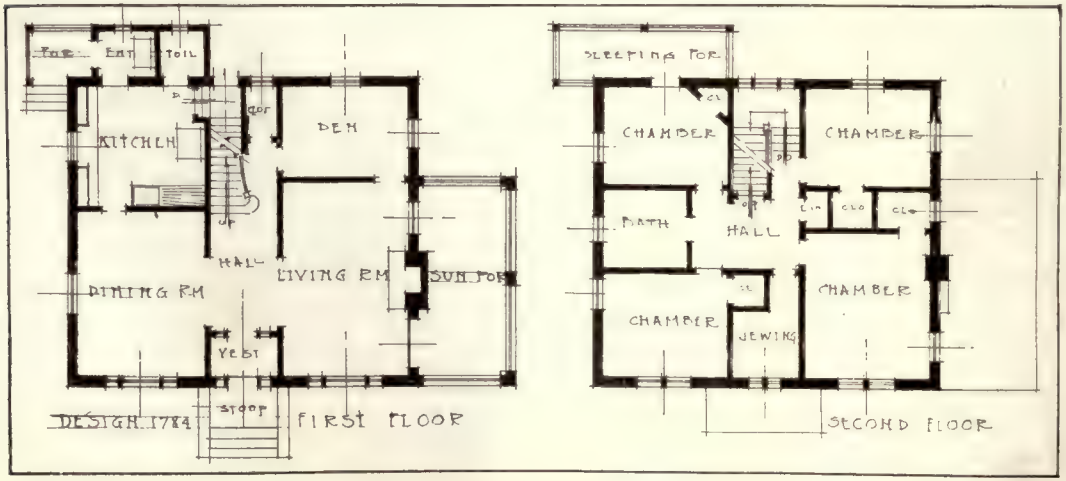
Walls are of hollow tile faced with brick, with rough-cast cement plaster and half-timbers in gables.

rear porch and entry providing space for refrigerator to be iced from outside.

On the second floor are four well-arranged chambers, each with ample closet space, and a good-sized bath and small sewing room. A stairway leads to a good attic and a sleeping porch has been provided over rear porch and entry.

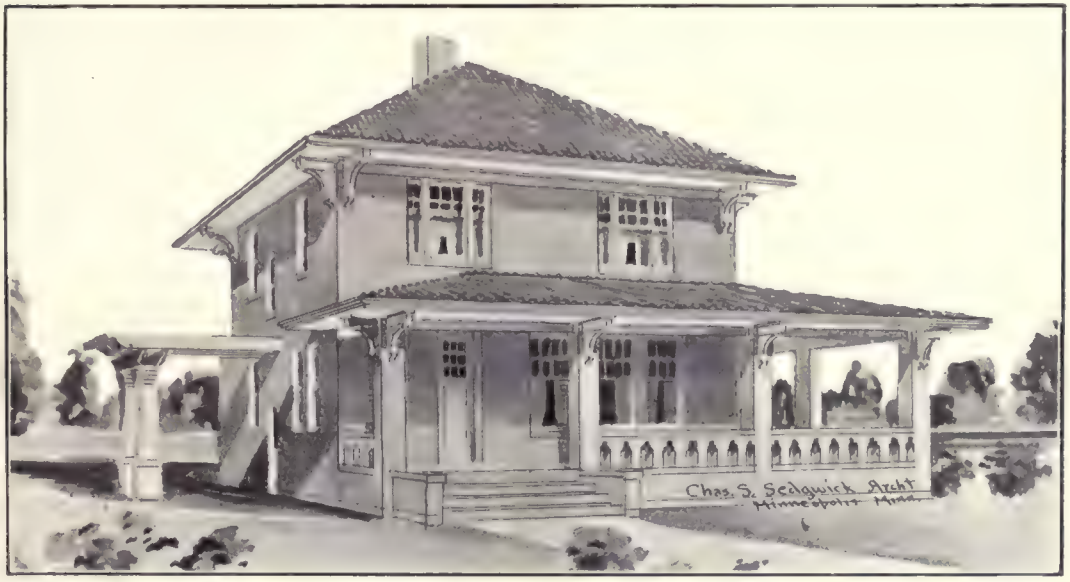
It is intended to finish the first floor in white quarter sawed oak, fumed, with den and sun porch in fir, stained. Second story in white enamel with white oak floors. On the first floor pine is used in kitchen over which linoleum is to be laid and maple or birch flooring for second floor, with tile floor and wainscot for bath.

Full basement is provided, with hot water heat. Laundry, fruit and vegetable rooms have been partitioned off in basement. Concrete foundation to be used, with brick steps and sills.



A Small Brick House

THIS is a design for a small, convenient, substantial and well built brick veneered house, which is 27x32 feet, exclusive of piazza, 9 feet in width, extending across the front and right side. The rear 16 feet of this piazza is glazed-in opposite the dining room, with French windows opening onto it.

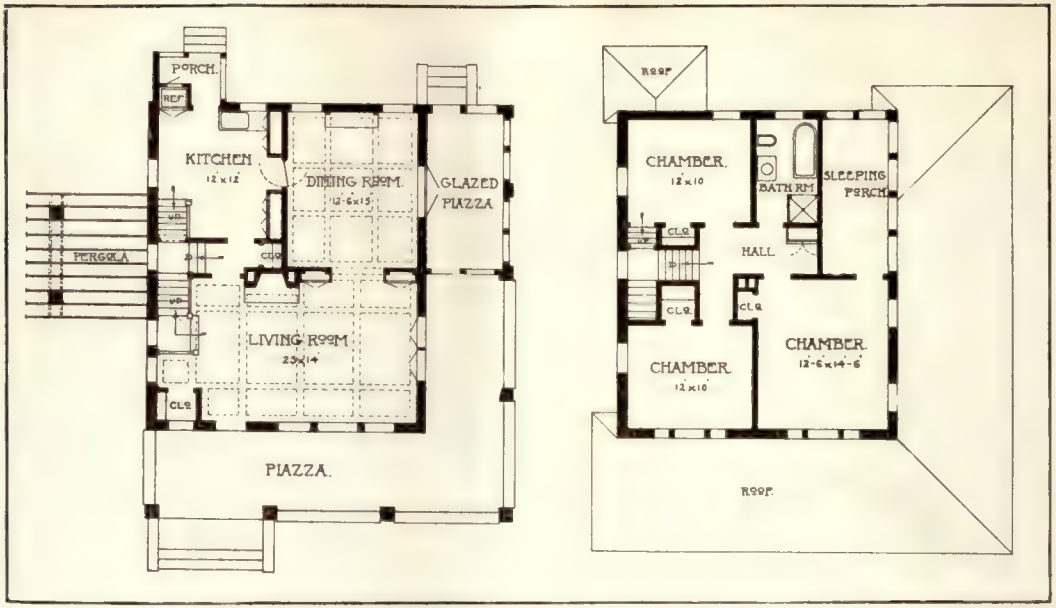


Generous porch space is a feature of this attractive house. Chas. S. Sedgwick, Architect.

The exterior walls are built with studding, sheathed on the outside and veneered with dark Oriental brick. The roof is low pitched, substantially timbered, and covered with red Spanish tile; also the piazza roof is covered with the same tile. The floor of this piazza is of reinforced concrete.

The entrance from the piazza is directly into living room, without vestibule. The main living room extends across the entire front of the house and is 14x25 feet. There is one central chimney with wide fireplace in the side of this room and a flue for heating plant and kitchen. The main stairs go up directly at the left side of the living room and back underneath the stairs is a door leading to rear passage. From this passage there is a side entrance to pergola and basement stairs, with door in rear to kitchen. The kitchen is 12x12 feet, with ample cupboards and opening to the right into the dining room, 12 feet 6 inches by 15 feet, with floor finished in oak. Living and dining rooms are finished with beamed ceilings.

There is no waste space in this house; every inch of floor space is utilized. The second story has three good chambers and a glazed-in sleeping porch over the dining room and liberal sized bathroom with shower bath in connection; all rooms are provided with good closets. The attic space is used for storage only, with stairs leading up to the same from rear chamber. The finish of this story



is in white enamel with birch floor.

There is a full basement under the house and under the piazzas with servant's room in basement, bathroom, etc., room for heating plant and for storage; the foundation walls being of concrete.

A Cozy Six-Room Bungalow

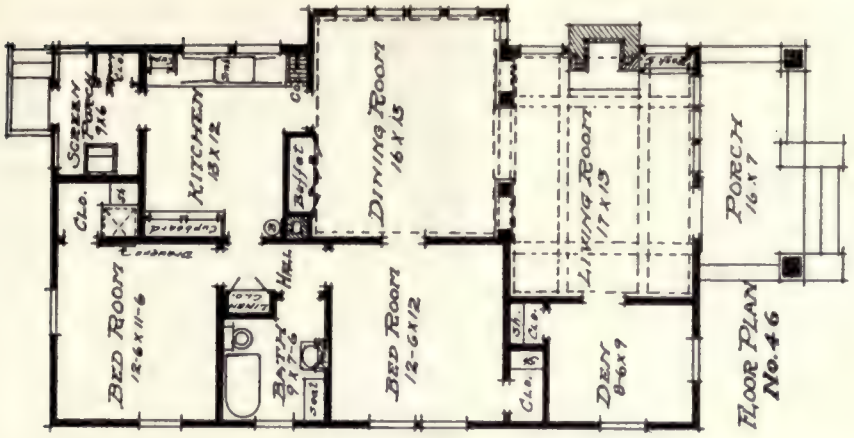
THIS little home is only about 28x48 feet, but it contains a surprising amount of room. The apartments are of good size and exceptionally well arranged. It was planned by a lady who does her own housekeeping and every endeavor was bent to save steps in the daily routine and to render the home-making as pleasurable as possible.



The little home was designed with all the conveniences possible to make housekeeping easy. Bungalowcraft Co., Architects.

The number and size of the closets are worth noting. The linen closet is fitted up with drawers, shelves, etc., and the rear bedroom has a built-in dresser with drawers, in addition to a large closet.

In construction, the outside is covered with either weather boarding or shingles at the option of owner; the roof is shingled and the front



porch work and chimney are of brick, pointed with dark gray mortar.

The architects state that this house was built originally in California with oak floors in living room, den and dining room for $1,620 complete and ready to move into, even including cement walks, screens, etc. In Ohio with cellar and furnace and attic storage room, reached by a moveable ladder and scuttle from hall, it cost nearly $2,000. The built-in features such as buffet, mantel, seats, and bookcases in the buttressed opening between living and dining rooms were specially designed for the house and harmonize most artistically without any of the cheap, gaudy, "ginger bread" work which is an eyesore in so many houses. The kitchen is fitted up with every convenience even to a dust chute to save back-breaking over a dust pan.

English Half Timber Design with Brick Terrace



This house will look more home-like when vines and shrubs have relieved the barrenness of the walls.

ANOTHER typical "English" design quite different from the one illustrated on page 372. The house sits lows to the ground and has an open brick terrace across the entire front. The house looks a little plain, but a few vines clinging to the rough case cement walls, framing the attractive group of casement windows with their small panes, and the base well planted with hardy shrubs will make a very marked improvement after a season's growth.

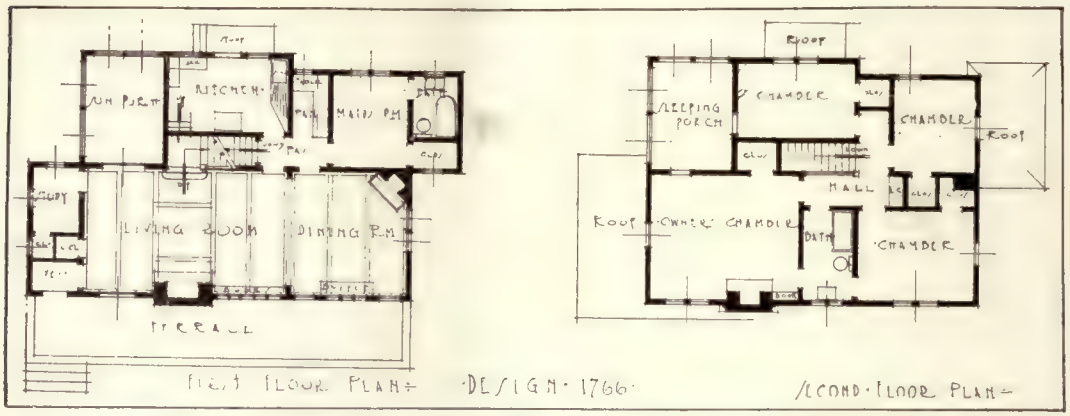
The construction of this house is cement over frame walls, over which metal lath has been used, and shingles for the roof.

Note the long living and dining room across the front, separated by an extra wide cased opening, which makes an ideal room for entertaining. Living room has brick fireplace and bookcases built in. There is also a fireplace in dining room and a built-in buffet. Beamed ceilings are used in both rooms. Off the end of this dining room is a small study.

French doors open onto a small sun porch. The plan provides for a maid's room and bath on first floor, easily accessible to kitchen.

On the second floor, four good chambers have been provided, with ample closet space and large bath between the two front chambers, serving as a private bath. Owner's chamber, with fireplace, opens onto a sleeping porch at the rear. The attic is sufficiently high to give good circulation of air and could be finished off if desired.

Basement is complete with laundry, fruit and vegetable rooms and furnace room.



A Frame Cottage with Gambrel Roof

HERE is a well planned cottage design finished with shingles on the first story to beltcourse, running around the entire house on a line with the porch beam. The second story, excepting in the upper gables, is finished in narrow siding. A wooden balustrade is used both up and down on the front porch, the roof which is supported by four well proportioned Colonial columns.

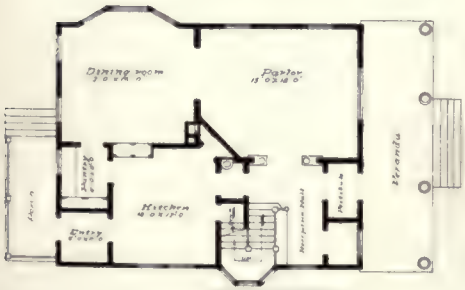
The interior arrangement is of a popular plan for a six-room cottage. The entrance is through vestibule into a small reception hall which is provided with a



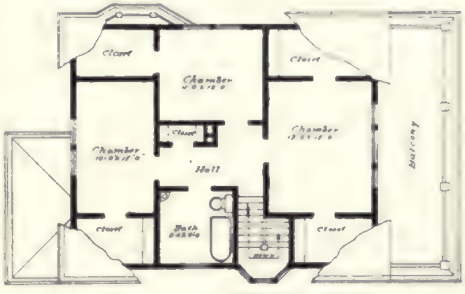
This cottage would nicely accommodate a family of five or six. F. E. Colby, Architect.

coat closet. You will note the arrangement of the stairway is attractive, with a built-in covered seat, which gives a most convenient place to deposit the auto robe, rubbèrs or whatever extra outside garments are not required to be hung up. The rooms are pretty evenly divided as to size. The dining room has a large bay window with built-in china closet directly opposite the bay window. Columned opening is provided between hall and parlor.

This style of cottage home will find favor with a great many of our readers. The design is contributed by Architect F. E. Colby, whose work is seen in the magazine frequently.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

A Departure from the Conventional

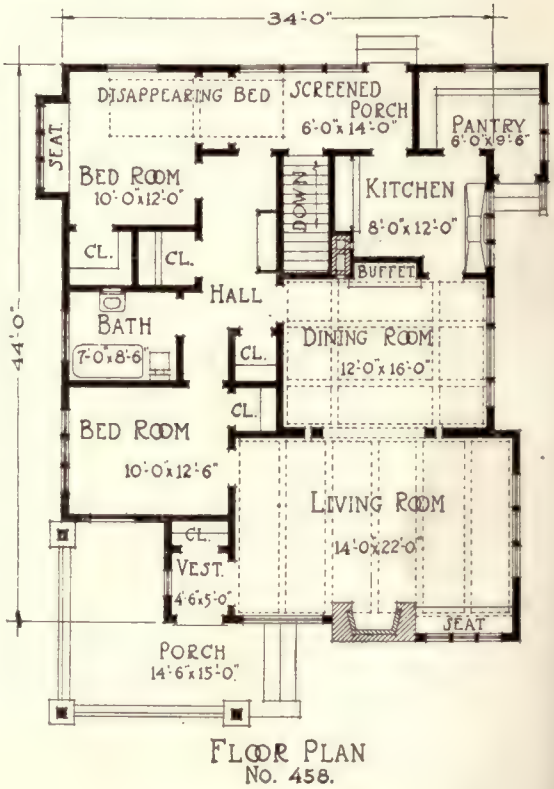


The free style of bungalow architecture is shown in this attractive little home. Jud Yoho, Architect.

DEPARTING somewhat from the exterior appearance of the conventional five-room bungalow is this pretty home. Perhaps the most attractive feature of this plan is the bedroom, equipped with a reversible concealed bed, so arranged that it can be used either in the bedroom or in the sleeping porch in the rear.

The living room is unusually large and is divided from the dining room by an open arch. Both of the principal rooms have beam ceilings and panelled wainscoting. Although the kitchen is small, ample cupboard space is provided in the pantry. The plan affords a great deal more closet spact than is generally found in a bungalow. Special notice is called to the convenient way in which the rooms are grouped around the pass hall.

The cost in California is estimated by the architect to be approximately $2,500.



FLOOR PLAN
No. 458.

Remodel The Old House!



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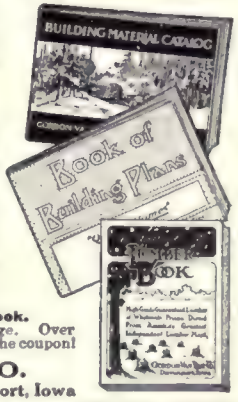
THESE are **actual photographs.** They show how an old farmhouse was **remodeled into a fine colonial residence** through the assistance of our Plan Department. **A new porch** was added. **A new front door with side lights** was set in. **New dormer windows** in the roof converted the attic into a fine big room. And the entire house was given **two coats of "Quality" Paint.**

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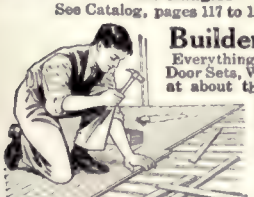
Diamond Point Edge (looks like shingles) per roll of 108 Sq. ft. $3.00

Straight Edge Per Roll of 108 Sq. Ft. - - $2.25



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Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Value of Blue in Combination with Other Colors.

NOTHING is commoner than flowered china, exquisitely beautiful in design and coloring, yet how often, despite all these good qualities, there is a certain insipidity in its general effect. It needs the foil of a decided color to bring out the delicacy of the colors and to accentuate their contrast. If you can find a piece of similar character, as to design and color, in which the plates have an edge of dark blue, you will be aware of an added distinction and charm.

In dyeing, when a color performs this office of harmonizing opposing colors, it is called a mordant. In Oriental porcelains one often notes a touch of black used for this purpose, and in embroideries a rather dark golden brown used for outlining forms in bright colors has the same effect. In furnishing, something the same office is performed by the use of dark wood, such as the Jacobean or baronial oak. One reason why golden oak is such a difficult proposition to handle is that we instinctively look to the wood of the furniture to supply the needed accent, and its tone is too light to do this. The introduction of a good blue fabric in many bright colors would save many a room from insipidity. I think I have at some time within a year or two mentioned a room done by an English decorator of repute, in which the walls were frankly white, the woodwork and furniture light oak, the whole redeemed by the use of much blue china and a rug in strong tones of red and blue.

Another illustration of the value of blue is found in French painted furniture. There is at South Kensington a beautiful table, with an oblong top and curving legs, extremely simple in construction, which has been painted a medium blue, with the very faintest suggestion of green in its tone. On the top and at the sides and ends of the framework supporting it are insets of a delicate, rather yellowish green, framed in gold scroll work and painted with flowers in tones of salmon red. Other painted furniture has a ground of low toned green, with the blue in the form of knotted ribbons connecting garlands of pink flowers.

In choosing the proper tone of blue to combine with a number of other colors the best guide is the study of decorated china. If you have access to a collection you will find in the works of the French potteries many examples of this use of blue, and you will note that the blue is always a pure blue, unless it is slightly modified by green. Never will you find in good work that the blue used has a purplish tone. A ware which you are quite certain of finding in the average shop has an admirable tone of blue used as borders in combination with gold lines and powderings, the English Royal Worcester. The dark blue of Dresden is much the same.

Our eye for color is too often trained by the study of dress materials, whose scale of color is wholly different from that used in decoration. To be sure you may once in a while run across some dress fabric which can be used for furnishing. Some of the mulberry and dark rose shades in broadcloth or soft silks have their uses, but such exceptions are few and far between.



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An Opportunity for the Amateur.

I am always thinking of the numerous girls with a certain amount of artistic taste, skill and training, who after two or three years in an art school find no special scope for their talents and their laboriously acquired skill, and who must feel that their time has been largely wasted. Why do not some of them take up the painting of furniture? Not the mere application of enamel paint to old chairs and chests of drawers, but the effective decoration of small articles with garlands and festoons in the French style. It is not difficult to find designs for this work, if one does not feel equal to originating them, and a study of good pieces of Sevres and Dresden china will be found most suggestive, while a book on French furniture of the eighteenth century will give the key to the adaptation of floral design to decoration. The work is done in oil color, after the pieces have been given several coats of flat color. The various small wooden articles sold for pyrography cost little and are useful for experimental purposes.

One thinks always of this painted furniture as having a light ground, white or pale gray, but old examples are quite as often of positive color, blue, light green, or yellow, sometimes, though this demands a different sort of coloring for the decoration, the cool blue gray or Jasper Wedgwood. If one wants to use a white ground I think a cream or ivory tone is happier than pure white, and especially charming is that grayish white which one sees in old French furniture and interior decorations.

The Summer Tea Table.

A charming tea room in London is suggestive, and its scheme might easily be carried out in a summer house. The floor has a pile carpet of soft gray, and the tea tables, instead of being clothed in white have hemstitched cloths of pale pink linen. The china is abundantly flowered and the chairs are covered with glazed chintz in a flowered design on a plain white ground. The effect is admirable and an agreeable change from mere daintiness.

One of the uses to which the alcove, or small room leading off a large one may be put is that of a tea room. When a single place is set apart for this purpose it is easy to carry out a definite color scheme, and the glimpse seen from the larger room is a great addition to it. Any number of charming color arrangements, suggested by the color note of the china used, can be worked out.

Half Curtains of Silk.

Ecru pongee, inexpensive and always available, is a charming material for sash curtains, either long, or else confined to the lower half of the window. The thirty-three inch width is the best for this purpose, as it allows for a generous hem at either edge. The best finish is a hemstitched hem, and the work is not very great. Sometimes they are edged at the sides and bottom with a gathered ruffle, sewed on with a facing an inch and a half wide. This demands hand work but the result repays it. Sometimes curtains of this sort are made in two sections, one attached to the top of the window frame and reaching to the sash, the other pair beginning at the sash and reaching to the sill. This enables one to admit plenty of light from the top of the window, while the lower set secure desired privacy.

Sometimes these curtains are made of white wash silk, and the tendency to yellow with washing which makes such silk objectionable for personal use is of little consequence, as the creamy tint harmonizes better with most furnishings.

One solution of the difficulty of the poorly lighted hall is to cover the walls with a paper having a rather large conventional design in color on a white ground, using a plain silk in the same color for half curtains. Once the eye becomes accustomed to seeing the windows of a single house treated in different ways, the advantage of so doing will be realized. How often the effect of a large room furnished with a certain solidity and in dark colors is diminished by the use of thin curtains having no possible relation to the scheme of the room, but thought essential to the uniformity of the outward aspect of the house.



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Dressers and Sideboards.

The sideboard is usually an extremely ugly piece of furniture, seldom well proportioned, and of a height which leaves an awkward space above it. A mirror is apt to be considered essential to it, which adds greatly to its expense. The dresser is less pretentious, practically merely a high cupboard with open shelves above for plates and china. Sometimes there are two or three drawers in the lower part, for linen and small silver, sometimes only a cupboard and the whole raised on rather high legs, and often the three or four shelves are broken with a small cupboard. The dresser is extremely popular in England in houses of a moderate sort, which are artistic rather than smart. Belonging as it does to the oak period of English furniture, it goes specially well with the gate-legged tables and high-backed chairs of that epoch, although there is a Queen Anne dresser, which has curved legs like a lowboy, and must have been made of mahogany.

And speaking of sideboards, I wonder if we all realize that when an old mahogany sideboard had a straight brass rod across its back it was intended to support a silk curtain, which formed a background for the china and silver displayed.

It ought not to be difficult to have a dresser made to order. The proper proportions are about six feet four inches in height and three feet six inches in width. Any book of old furniture supplies illustrations. Probably one might be had of some manufacturer, one specializing in cottage furniture. A dresser is specially suited to the dining room of the modest country cottage. It should have a cover not of lace, but of heavy linen, simply hemstitched.

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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Decorating a Swiss Chalet.

J. C. Jr.—"I am writing for suggestions as to finishing a house we expect to build soon.

"The house will be two-story, on the Swiss chalet style, facing the south. The down-stairs consists of three rooms, living room, dining room and kitchen. The living room will be across the front and is to be 15x30. The fireplace and bookcases in the west end, ceiling to be beamed, stairway on east. The dining room is on the northwest, with a large opening from the living room.

"My living room furniture consists of a tapestry davenport, large mahogany colonial table, mahogany colonial writing table, medium brown reed chairs with cushions like davenport, and a small Grand piano. The rug is a Wilton, in Oriental design, with tan, blue-green and dull rose predominating, and is a little lighter than the tapestry. The dining room furniture is Adams style mahogany, large table, 66-inch buffet, and tea wagon. The rug for this room is a Wilton, in Oriental pattern, with dull blue, rose and green coloring.

"I had thought of birch woodwork stained mahogany in the two rooms, but I have been told it requires considerable finishing to give a good finish and we didn't want it to be too expensive, etc."

Ans.—First, a mahogany finish on birch need not be so expensive. We would prefer a dull, waxed surface to a highly polished, and it is in the repeated coats of varnish and rubbing that the expense comes in. We advise birch trim with a brownish mahogany stain for the living room, then a coat of wax and one good rubbing. If the woodwork is well sandpapered before staining, this will give a finish which will not mar or scratch so easily and is not more expensive than any proper finish. We could do the stairway the same, but in the dining room, with the beautiful Adams furniture, we should use ivory white woodwork with mahogany doors.

We do think tan too warm a color for the walls, and would much prefer grey, but you can use a putty grey instead of a blue grey, which will not be so warm and will still be in entire harmony with your rug and tapestry.

The fireplace brick would be pleasing in grey tones.

We would then, in the dining room, emphasize the rose tones that are in the rug. We would stain or paint the plaster panels of the wainscot a deep rich crimson and the wall above a rose that would harmonize. Make the ceiling ivory like the woodwork. At the windows have ivory madras curtains, and if you can, deep rose over-draperies. Your rooms will be very beautiful.

White woodwork and white wicker will only emphasize the ugliness of the golden oak furniture. But paint it, either white or ivory, same as woodwork, or better still, a rich greenish blue with ivory woodwork and grey walls. We would not like pink draperies in this south room with white woodwork and furniture, but paint the furniture as we suggest and have a blue and green cretonne for hangings and it will be a cool, lovely room.

Scheme For First Floor.

J. W. B.—"I am enclosing first floor plans of a home we are soon going to build and may I avail myself of your kind offer of help in meeting interior decorating problems?

"Please state how the walls should be treated and especially in dining room with beamed ceiling.

"Color schemes of walls, curtains and

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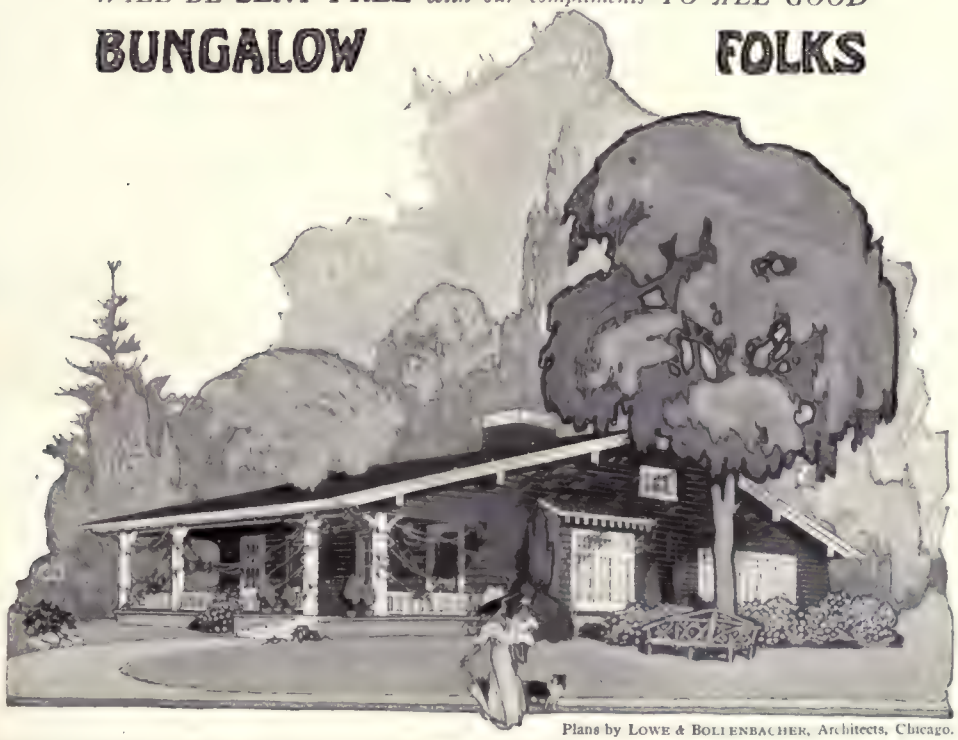
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rugs; also what furniture should be used in the living room, dining room and den?"

Ans.—Your letter is not very explicit and we could be more helpful if we knew more about your plans.

In regard to color schemes for the walls, with the living room facing south and dining room northeast, a very pleasing plan would be to stain the oak in living and dining rooms northeast fumed oak, and den in forest green.

The beams in dining room ceiling must be the same as the trim below and we would tint the plaster between deep ivory, making the walls old gold, with rug in browns and creams and curtains old gold sunfast. No other curtains needed.

The furniture fumed oak. This will be a pretty color scheme for a northeast dining room and serviceable. It will open well into the living room, with putty grey walls, grey fireplace brick and rug and hangings of soft lichen green, not a bright grass green. Here you should have inside or glass curtains of net or voile. Furniture partly fumed oak, partly wicker. The walls of the den we would make grey for a background, with a frieze of green leaves at the top and furnish entirely in natural wicker upholstered in a cretonne having lots of rich green leaves and red roses. Use the same cretonne for curtains and have a rug of Scotch kilmarnock, grey center with border of green foliage and dull red flowers.

Redecoration to Aid in Selling.

N. S. R.—"Our home is in a poor locality and I am depending upon your good taste to aid in selling it this spring. Am enclosing samples of wallpaper for three rooms. Intend to paint the ceilings a cream color. Would you choose a light or deep cream? The kitchen is painted yellow and light brown.

"The woodwork in the living room and hall is a little darker than a dark oak stain. The furniture is a very poor collection, being left-over pieces from mother's home.

"Please suggest an inexpensive material for over-curtains. I would like something in a rose colored all over-design to match rose in wallpaper border, if it would be in good taste, etc."

Ans.—You have indeed asked many questions and we fear that even "good taste" will be sorely put to it to make this house as attractive as you desire. However, something may be done, though the rooms are small and poorly arranged to start with. In the first place, you must use plain materials as much as possible in the living room. The figured rug is as much pattern as so small a room will stand. For a cheap house, the paper sample you send will probably answer, though it is very ordinary. The combination of brown and dull rose is fairly good and will be serviceable and is probably as good with your mixed furnishings as you can do. The ceiling color should be ecru and not cream. There is a plain sun-fast material which comes in a harmonizing tone of color with the dull rose of your border, which is the best thing we can think of for over-curtains. It is about 85 cents a yard. You can repeat this color in some of your minor furnishing. We should not use a valance in this room, simply straight side over-drapes. A voile or ecru tone will be proper for glass curtains. We should not curtain the door into the hall. This long narrow hall should not have such a dark green paper as you have sent. A small, all-over conventional design in greys with touch of black, with light grey ceiling, will be better. Hall runner green lined in black.

We should prefer omitting the border in paper sent for bedroom, running the stripe, which is dainty and pretty, up to a white molding. Then use a chintz with pattern of small pink roses and green leaves for curtains and upholstering of chairs, box, etc. Here we would use a 12-inch valance across top of curtains. Its "decorative value" is to soften outlines and repeat the color tones. We do not see how you can give a Japanese character to this room, but it will be very pretty carried out in this way. As to doors, if there is none into hall there certainly should be. It would be possible to use a curtain of the chintz at the closet, lining it with a heavy plain material to give it sufficient body and weight.



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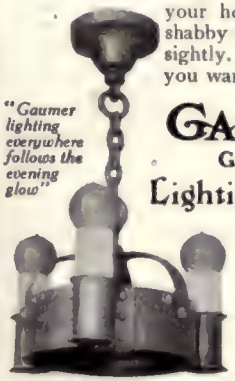
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For a New Bungalow Home.

C. C. M.—"I wish you would help me out in the interior decoration and furniture for my new home. Floors and woodwork are oak, fireplace brown brick, built-in bookcases, colonnade between living room and dining room, with leaded glass doors opening into dining room; built-in buffet and china closet."

Ans.—Inasmuch as all your furnishings are to be new, it will be easy to plan an attractive interior. We do not blame you for not wanting brown tones in your living room and as this sketch shows good lighting and a south front, brown would not be desirable. But in that case, do not start with golden oak furniture, woodwork to match, and brown brick for fireplace, for with such a foundation you are tied up to either some tone of tan or brown for walls, etc., or green. There are now such lovely new effects in furniture, not expensive either, that it seems a pity to deliberately choose golden oak, which never comes in the best styles. The Kaiser grey oak furniture, for instance, comes in such pretty shapes and is such a delightful color, a sort of smoke grey, dull finish and the woodwork of living room could be finished the same. Then grey brick for the fireplace, walls of imitation grey grasscloth, for the real thing is expensive, 85 cents per square yard, and some of the imitations are excellent. Then rich rug and furniture covering, use rich deep blue. The wicker chairs are lovely stained grey; then your choice of fumed oak in dining room would be excellent and woodwork to match, with warm, deep rose or crimson for rug, etc. Thus the two rooms would form a delightful contrast.

We should change your arrangement of the living room furniture, bringing the couch in front of the fireplace and backing the long way of the library table up to it. Your room is sufficiently long to be well suited to this arrangement, which is now considered the preferable one. This would allow you to place the piano near the south window.

As to style of couch, we do not like the "over-stuffed" style. We like some frame to show. Tapestry is a good and serviceable covering.

Treatment for French Doors.

S. B.—"I am writing you to find out the best way of treating French doors. We have two in a living room (26½ ft. long) opening directly onto a front porch and one is to be used as front entrance. These two opening onto porch are my problem. I see casement cloth is being used rather than shades at windows and would I use these same casement cloth shades at French doors?

"What color do you suggest for this north living room? We have mahogany trim with a soft brown tile mantel. I do not like brown, as I am tired of this color. What would you suggest for hall? I want blue in dining room, doors mahogany wainscoat, mahogany downstairs and white woodwork, and mahogany doors upstairs."

Ans.—You are under a wrong impression concerning the use of casement cloth, which is a drapery and not a shade. It is not intended to take the place of a shade, but is used for side hangings over lace or net or any thin curtain. However, by first veiling the French doors with the thin material which is used across the glass and shirred on small brass rods at top and bottom, then on a separate heavier rod, having draperies of the casement cloth which you can push back when you do not want so much screen, or draw over when you do, the doors will be screened all that is necessary. The way to treat French doors has been many times described and also illustrated in the pages of *Keith's Magazine*. It is a pity you have missed these articles.

As to color in north living room, much depends on the rugs and furniture to be used. The color of the walls and draperies must harmonize with them. As you already have brown tile, a soft tan grass-cloth paper with hints of gold in it on the wall would really be the best choice, and there is a casement cloth which just goes with this paper. Such a scheme would go excellently well with blue in the dining room.



FIREPLACES THAT ARE RIGHT

A smoky fireplace makes your living room unbearable. Nine times out of ten it's due to faulty construction. Then why not buy a

COLONIAL FIREPLACE

that is shipped to you with all *Arch* brick and *Moulded* brick ground and fitted for setting up according to a *Full Size Detail Plan* which is sent with the Fireplace showing *Proper Construction* and makes *Erection Simple.*

Colonial Fireplaces are equipped with the Colonial Head, Throat and Damper that is adjustable to all weather conditions.

Colonial Fireplaces are *economical* both in labor saved when installed and in consumption of fuel. Our booklet "The Home and the Fireplace" contains a mine of information. Send for it today.

COLONIAL FIREPLACE CO.
4612 West 12th Street
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CAREY
Ceil-Board
SUPERSEDES PLASTER
FOR WALLS AND CEILINGS

Furnished in Quartered Oak, Circassian Walnut, Plain Gray and Plain Tan. No further finish needed for Wood Grained effects. Gray or Tan finishes may be wallpapered or painted. All styles thoroughly moisture-proofed.

Illustrated booklet showing finishes in their natural colors free for the asking.

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General Offices:
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CAREY CEIL-BOARD

Weathered Gray BIRCH

Birch trim, finished in **"Weathered Gray,"** gives that **wonderfully pleasing and dainty effect** for which many have sought in vain.

Records do not disclose any other wood, native or imported, with which the same clean and inviting effect can be secured. It is an excellent variation from enameled woodwork, now employed so extensively in the Modern Colonial home.

Finished samples, showing Weathered Gray, and other finishes, are making friends wherever they go. Neatly packed and mailed upon receipt of 10 cents, stamps or silver.

When writing for samples, **ask for Birch Book K.**

Birch Book K will tell you all about Birch and why it is offered as the **genuine thing**—**Genuine Birch**—and not as a substitute for any other wood.

Northern Hemlock & Hardwood Manufacturers Association

Department K **Wausau, Wis.**



"Safety First" with Fire

By the Economist

THE dread of waking some night to find his home aflame is in the heart of every man. Fire, the monster that has no mercy, is liable to break out at the most unexpected time and place.

Man recognizes the fire danger in his home or place of business and carries insurance or provides fire extinguishers, but does that provide for the personal safety of his family or employes?

It is true that outside fire escapes are provided for most buildings such as schoolhouses, stores, office buildings, factories, etc., but disastrous fires have shown them to be insufficient, as the smoke and flames pouring from the windows alongside sometimes make them useless. An outside fire escape is an ugly blot on a fair exterior, though there are times when the need of one is most sorely felt. Such a fire escape is impractical for the home, as it disfigures, forms ingress to burglars, and incidentally costs several hundred dollars. But what is the use of having one when you can put at your hall window a portable, folding steel ladder? A child can throw one end of this device from the window, and, if necessary, climb down by it while it is still in the act of unfolding.





This ladder is strong enough to hold two or three people at once.







Herringbone prevents accidents like this

Herringbone Metal Lath on inside or outside walls, holds plaster fast—makes homes that stand against time, weather or fire. The picture below illustrates the broad strands and characteristic appearance of

Herringbone
Rigid Metal Lath

These broad flat strands give a non-cutting spreading surface. They afford a big area for plaster and stucco to hold to. Herringbone walls do not crack.



Are you interested in a home that fire will not burn, that weather cannot destroy? If you are

"The House That Father Built"

will prove the most interesting and instructive book on building that that you've ever read.

A statement of what and when you intend to build will bring you this book of pictures, plans, details of construction, and other helps in working out a beautiful fire-resisting house at a reasonable cost.



Trade Mark Reg. U. S. Pat. Off.

GF YOUNGSTOWN OHIO

The General Fireproofing Co.

950 Logan Avenue **Youngstown, Ohio**

Makers also of Self-Sentering, the concrete reinforcement that eliminates the need of forms.



His Coal Bill Cut Two-Thirds

Saving of ½ to ⅔ Guaranteed the New-Feed UNDERFEED Way!

Stop! Read this. It means money saved to you. It means better, cleaner heat. And please remember that all this comfort and saving is guaranteed—*guaranteed* the Williamson New-Feed UNDERFEED way. It is but one instance among thousands of such others that we can show you.

"The year before my UNDERFEED was installed, my house was heated with an Overfed Furnace of so-called "standard" make. My coal, year before last, cost me from $3.00 to $3.25 a ton; the bill for the winter ran almost $90.00, and during that winter only about half of my house was heated as a house should be.

"Last winter the same house was heated with one of your UNDERFEED Furnaces. The coal used was "Slack," which cost me $1.50 per ton; the bill for the entire winter ran about $35.00. The house was comfortably heated every day of the winter, including windy days.

"A comparison of those two years has convinced me of the superiority of your UNDERFEED Furnace."

Yours respectfully, (signed) H. Ernest Hutton,
401 Baum Bldg., Danville, Ill.

WILLIAMSON NEW-FEED UNDERFEED Furnaces and Boilers — CUT COAL BILLS ½ to ⅔

The "Candle" Principle

The New-Feed UNDERFEED operates on the "candle" principle. Coal is fed from below. Hot, clean coals and flame are always on top in direct contact with most effective radiating surfaces. In passing up through the live fire, all smoke, gases and dirt are consumed and utilized in the form of clean heat. They can't go up the chimney and be wasted as in top-fed heaters.

Burns Cheaper Grades of Coal

And the New-Feed UNDERFEED burns the cheaper grades of coal—a first great tangible saving. And the New-Feed is so simple that a boy of 12 can operate it with as good results as when the fire is in charge of a professional "furnace tender." Adapted to warm air, steam or hot water.

Cut-Out View of Underfeed Furnace



Learn More About It

Send the attached coupon. Remember the 50% saving in coal bills is guaranteed where the New-Feed is properly installed and operated. The coupon brings you, free, the interesting book "From Overfed to UNDERFEED" which describes the New-Feed's simple operation. Sending the coupon costs you nothing—places you under no obligation. Send it NOW!

The Williamson Heater Company
(Formerly The Peck-Williamson Co.)
196 Fifth Avenue, Cincinnati, Ohio

THE WILLIAMSON HEATER CO.
196 Fifth Avenue, Cincinnati, Ohio

Tell me how to cut my coal bills from ½ to ⅔ with a Williamson New-Feed UNDERFEED.

Warm Air_____ Steam or Hot Water_____
(Mark an X after System interested in)

Name_____

Address _____

My Dealer's Name is_____

There is no longer any excuse for the absence of anymeans of escape from the u' ɔper storiesof a burning house, when s uch an easyand cheap fixture as this can be installed.

This folding fire ladder, recently put on the market by a Chicago firm, is made of steel in units that unfold and lock in a rigid ladder. Each unit is securely braced and the top of the ladder is equipped with forged spring snaps and chain so constructed that they may be readily fastened to any substantial object. A two-story ladder weighs about 25 pounds, while a three-story ladder weighs 40 pounds, and a woman or child can very easily handle them.

The "Safety First" movement so generally accepted in business life, leads a man to extend its application to the safety and security of those most dear to him, namely, his family in the home. If your home is inadequately provided for in case of fire and is insufficiently protected against this great danger, investigate this folding ladder which insures the safety of many lives by the expenditure of a small sum of money. The name and address of the manufacturer will be given to those interested.



Building?

Get This Free Book

It tells all about the proper method of finishing floors and interior woodwork, and improving furniture. A big help in beautifying the home—new or old.

Johnson's Wood Dye

Comes in 17 harmonious and natural shades. Makes cheap, soft woods as artistic as hard woods.

If you are interested in building we will mail you *free* a Dollar Portfolio of Wood Panels, showing all popular woods finished with Johnson's Wood Finishes. Remember—the Panels and the 25c book Edition K. E. 5, are *Free* and *Postpaid*.

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Plans and Specifications $5 up.

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A Universal Requirement In Every Modern Home



If you are planning or building a home or if in your present home you have worried through the fall, winter and early spring months without proper heat regulation it is certainly a matter of vital importance that you should know the advantages in comfort, healthful temperatures and fuel economy which can be absolutely and perfectly obtained with



The "MINNEAPOLIS" HEAT REGULATOR



No house equipment has more universally proven its efficiency—The standard for nearly a third of a century. Its automatic operation maintains any desired temperature day and night. Used with any kind of heating—hot water, hot air, steam or natural gas.

Sold, installed and guaranteed by the heating trade everywhere.

WRITE FOR BOOKLET



Minneapolis Heat Regulator Co.

WM. R. SWEATT, President

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"From Factory to You"

For this Elegant, Massive selected Oak or Birch, Mahogany finished Mantel.

Beveled Mirror 18 x 36

Price includes our "Queen" Coal Grate with best quality enameled tile for facing and hearth. Mantel is 82 inches high, 5 feet wide. Furnished with round or square columns, as shown in cut.

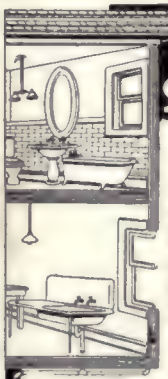
Dealer's price not less than $35.00.

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and Water Supply Systems Give the Country Home Complete SANITARY EQUIPMENT

and enable you to install in your home modern plumbing for bathroom, kitchen, sink and laundry.

The construction of the Kewanee System is extremely simple and most of the material may be bought at home. The Kewanee Castings are the most necessary and important parts and are adjusted to give the best results. Our Bulletin explains all.

You can't go wrong in the installation of a Kewanee System when the simple instructions are followed, and the Kewanee Castings are used.

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like Public Utilities, give every city comfort to the country household. We will furnish plan and work with you for best arrangement of the following:

Water Supply Systems	**Sewage Disposal Plants**
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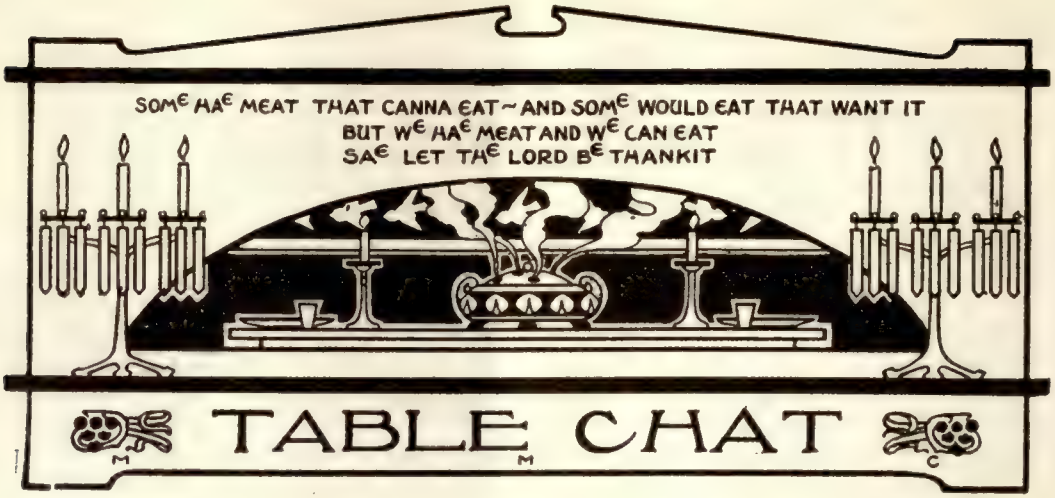
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BRANCH OFFICES: 50 Church Street, New York
1212 Marquette Building, Chicago



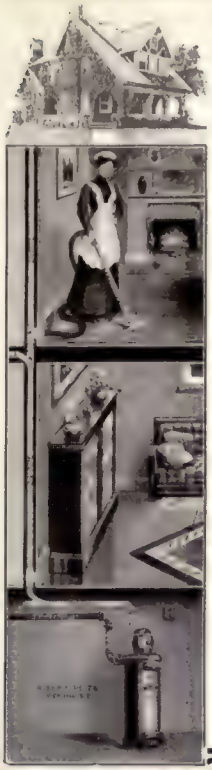


The Temptation to Unseasonableness

WHEN the early fruits and vegetables make their appearance, in the first days of spring, it is a great temptation to squander the housekeeping allowance upon them, although it is almost always a foolish expenditure. Early strawberries are either only half ripe or else have traveled so far in cold storage that there is very little flavor left, to say nothing of the fact that those grown in warm climates are not nearly as good to begin with as our native berries, while the boxes are small and poorly filled. It is the same with vegetables, which are picked so young that the grower must charge a very high price in order to get the proper return from his labor. Decidedly it is the part of wisdom to wait until all these delightful things are really in season before indulging in them, not alone from the economical point of view, but in the interest of one's palate.



A Hors d'Oeuvre of Stuffed Radishes.



Keep Your House Always New

Dirt begins to do the work of destruction the first day the new home is occupied. With ordinary cleaning devices you can remove only the coarser particles of dirt. The rest escapes from your brooms, dusters and portables and settles in the fabrics of your rugs and draperies and on your walls and furnishings. It is this unseen dust that cuts the nap of floor coverings and makes the house and its equipment look old.

TUEC STATIONARY CLEANER

"For Health and Cleanliness"

Removes all the dirt—fine as well as coarse. It cleans as no other cleaner can ever clean because it removes a larger volume of air. It renovates the home and purifies the very atmosphere, making it sweet and pure and free from the microbes of infection.

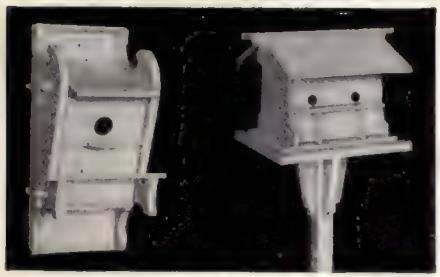
Out of sight in the basement, with 2½-inch piping connecting it with every part of the house, the TUEC is even more essential to clean and healthful living and the conservation of household economy than the stationary heating, plumbing or lighting system. The cost of TUEC Service is surprisingly moderate,—well within your means.

TUEC
THE HEART of the HOME

Write today for the TUEC BOOKLET. It is FREE

The United Electric Company

10 Hurford Street **Canton, Ohio**



No. 2. The Tavern for Bluebirds. Very unique design, painted white. Price..... $2.00

No. 3. Villa Double wren house; fine appearance. Brackets furnished. Pole extra. 6 to 16 ft.— 6cts ft..... $2.75

Make Your Garden a Bird Home

Blue birds, wrens, martins, all the feathered beauties will flock to your hospitality. Enjoy their morning greeting, and besides, your garden will profit by the destruction of insects.

Our UNIQUE bird houses, shelter and baths are most artistic and will give a quaint interest to your place. "Had three wren families in mine last year."— M. R. E.

Order today. Send check or Money Order and put up the house at once for bird families this Spring. **Ask for our UNIQUE Catalog.**

Special introductory prices for 30 days

THE GARDEN UNIQUE

3157 Ivison Avenue **Berwyn, Illinois**



No. 120. Colonial Bath Pedestal 46 inches high. Price only... $7.50



GOING TO FURNISH A DEN, TOO?

"We've been going to furnish a den for some time but found it would cost too much. I sent for the large "Come-Packt" catalog. After selecting the different pieces to fit the room, we found the bill was about half the retail price.

"WE SAVED $10.00 ON THIS LIBRARY TABLE

"Our saving of $10.00 on this table illustrates the remarkable savings on the furniture we bought. Every piece is exceptionally well made of quarter sawed white oak. I have never seen better furniture."

HOW THE COME-PACKT WAY SAVES YOU MONEY

"Come-Packt" furniture is not sold in stores—ONLY direct to purchaser, with a money back guarantee. Furniture stores make enormous profits. YOU save that profit for yourself—from 33 1-3 to 50 per cent. Think of it! It is shipped compact "Come-Packt" and our method of construction insures lowest freight rates.



Price $8.95
Saving $10.00

FREE CATALOG shows several hundred pieces for the home. Samples of all finishes on quarter sawed white oak, also actual samples of leather and upholstering material from which to make your selections, will be furnished on request. Buy "Come-Packt" furniture and save money.

THE COME-PACKT FURNITURE COMPANY 556 Derr Street, TOLEDO, OHIO

SECTIONAL "COME-PACKT"

Early Spring Salads.

We may, however, without danger to our purses, indulge in green salads very early in the season. A single hothouse cucumber or a pint of tiny string beans goes quite a long way when judiciously disposed on a bed of lettuce leaves. And when one is trying to make much out of little a mayonnaise dressing helps better than a French one, and now that eggs are cheap it is not extravagant. It is a good plan to make a quart of boiled dressing by a reliable recipe and keep it in the refrigerator. When it is needed for a salad add to the required quantity a couple of tablespoonfuls of good oil, which will flavor it. It is safe in following any rule for a boiled dressing to reduce the quantity of vinegar which is almost always out of proportion. A very good dressing for vegetable salads can be made with a basis of sour cream, adding oil and vinegar, pepper and salt. People who live in places where fresh, unsweetened condensed milk can be had will find that it makes an excellent dressing if vinegar or lemon juice is rubbed into it, drop by drop.

It saves a great deal of trouble to make mayonnaise in a quantity. It takes no more time, or very little more, to make a quart than half a pint, and it is a great convenience to be able to put a salad together at short notice.

To return to our spring salads, a young cabbage very finely shaved, with a judicious addition of onion makes a capital salad to be served with crackers and cheese. Another very good salad utilizes the tiny potatoes that one often finds sold cheaply at the beginning of the season. Pare them very thinly, boil them in salted water until tender but not broken, and when they are cold roll each one in mayonnaise and then in finely chopped parsley. Lay a couple of white lettuce leaves on each salad plate and arrange on them a layer of thin slices of hard-boiled eggs, then mayonnaise, lastly the potato balls.



Stuffed Lobster.

This is a good luncheon salad, as it is quite substantial, and is very good with brown bread and butter.

A Hors d'Oeuvre of Stuffed Radishes.

A very pretty hors d'oeuvre for a spring luncheon or dinner is made from good-sized radishes. Cut off the bottom part so they will stand firmly and scoop out all the inside, leaving as thin a wall as possible and cutting it in points at the top. Take a small cream cheese, season it highly with salt, paprika and celery salt, and press it into the cavities of the radishes, heaping it up well at the top.

Stuffed Lobster.

An effective dish for a supper table, the shell of a lobster filled with salad. Have the market man dissect the lobster, saving all the pieces in good condition. Fried lobster can be substituted for the salad, passing tartare sauce with it.



WE ANNOUNCE
TO PROSPECTIVE BUILDERS

The second of a series of inexpensive houses with Casement Windows designed for us by a noted American Architect.

FOR REPRODUCTIONS

of the Architect's beautiful drawings with floor plans, full descriptive text and information as to complete working plans, send 10c to

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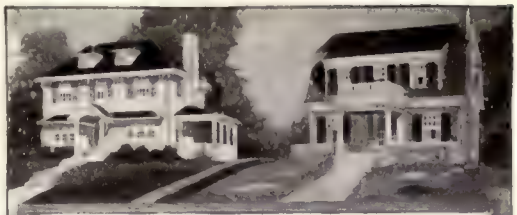
Screen with "PEARL"

Rust, *not* wear, ruins screens. Genuine Gilbert & Bennett PEARL Wire Cloth is as near rust-proof as metal can be made. That's why it wears so well. No other screen is *made* like PEARL so no other screen can *wear* like PEARL.

To be sure of "PEARL" wear you must get genuine PEARL Wire Cloth with two Copper Wires in the Selvage and the Round Tag bearing the Gilbert & Bennett name on each roll.

Write our nearest office for samples of both Regular and Extra Heavy PEARL, full details regarding same, and the name of nearest dealer.

The Gilbert & Bennett Mfg. Co.
(*Established 1818*)
Dept C-277 Broadway, N.Y. Dept. C-38 S. Dearborn St., Chicago
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The Best Hardware Dealer in Your City Sells "PEARL."



Which of these houses would you choose for your home?

You'd choose the one at the left, of course! The lawn and yard are neat and trim. The house is well painted. The whole property shows good care.

You will always take best possible care of your property if you paint or decorate with

Lowe Brothers
High Standard
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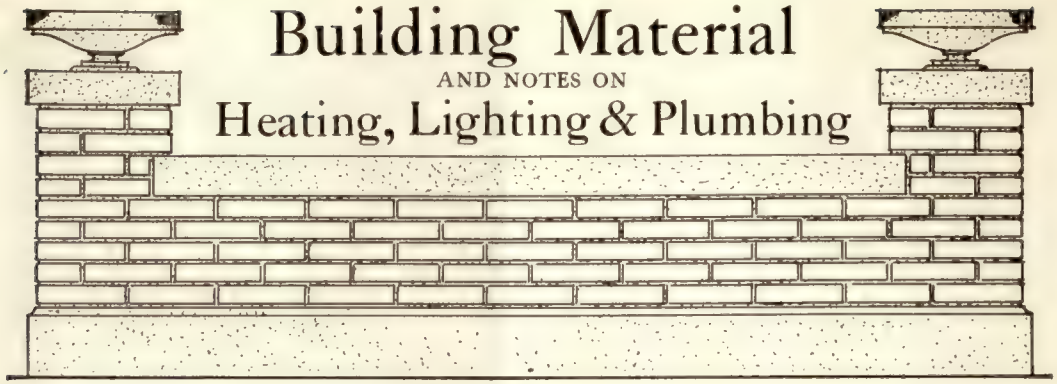
It is scientifically made from selected materials that the test of service has proven best. It withstands the weather for years, keeps its color splendidly, leaves a good surface for repainting.

For the inside walls and ceilings, the ideal finish is "Mellotone." Fadeless, washable and many rich hues.

Valuable book free

Write today for "The House Outside and Inside," full of information of best methods of house painting and finishing inside walls and woodwork. With it come eighteen views, inside and outside homes, in colors.

The Lowe Brothers Co.
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Kansas City Minneapolis
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Building Material
AND NOTES ON
Heating, Lighting & Plumbing

A Word on Paint Efficiency.

THE spirit of improvement seizes us all at this time of year and improvement nearly always means the use of paint to some extent. House & Garden, in a recent article, gives some very seasonable hints, extracts of which we give.

"You might just as well ask the question, 'Why go to the dentist?' as to ask, 'Why paint?' In both cases the answer is 'to protect from decay,' with perhaps the additional reason, 'to beautify.' Yes, paint is as essential to property as dentists are to teeth, and those who avoid either do so to their own loss.

"Granted, then, that you paint first of all to protect, and, secondly, to beautify, you face the problem of what kind of paint to use. You have the choice of hand-mixed paint or of ready-mixed paint. By hand-mixed paint we mean paint which a painter mixes himself. He often grinds the ingredients—white lead, linseed oil and the necessary drier and coloring pigments. The other way is to use ready-mixed or machine-made paint.

"Under no circumstances should a new house be painted before the wet basement or the plaster has dried out It should be borne in mind that every yard of green plaster contains nearly a gallon of water, and unless thorough ventilation is given and the moisture is allowed to evaporate and escape in that way, it must necessarily escape through the siding (which may have been thoroughly dry when put on), and the result must inevitably be blistering or peeling. Painting during, or following soon after, a dew or heavy frost or fog, or in any heavy, damp atmosphere, is likely to produce unsatisfactory results, as dry siding absorbs moisture very rapidly. To the greatest extent possible, painting in the direct heat of the summer sun should be avoided. Paint on the shady sides of a building as much as can be done. Painting around fresh mortar beds should be avoided on account of the tendency of the oil in any paint to absorb the moisture and fumes from the lime, destroying the life of the oil and causing the paint to flatten out and perish.

"Here are a few rules which in general apply to any finishing in which you want the best results. See that the surface is free from grease and soot. If it has been previously painted and is peeling, scaling off or cracking, burn off all the old paint. See that the surface is perfectly dry. Moisture is what often causes blistering, cracking, scaling, and like troubles. All pitchy surfaces should be treated either by burning or by sealing with good orange shellac. All knots should be carefully treated with shellac. Make sure the paint is mixed and stirred thoroughly before using. Do not paint in frosty weather, or over too glossy a surface. Any paint may 'crawl' under such conditions. Unless you have perfect confidence in your ability or your painter's, do not use boiled oil in any form or for thinning. Boiled oil never dries thoroughly, and always leaves the surface in bad condition for repainting unless rightly used. Pure, raw linseed oil should be used; it dries through and through and leaves a good, hard surface for repainting. "Elbow grease" must be used to spread any paint out into thin coats and to brush it well into the pores of the wood.

"Here are a few things to remember

Kept Young with White Lead



Here, in 1775, Patrick Henry expressed the undying sentiment of America in his words, "Give me liberty or give me death."

These words have consecrated the little church, and it is fitting that it be kept young despite its hundred and seventy-four years.

Dutch Boy White Lead

and pure linseed oil are the materials that preserve it. Your home, too, can laugh at time if you direct your painter to keep it well painted with Dutch Boy White Lead and Dutch Boy Linseed Oil. He can mix them to suit your house and tint to suit your taste. It is the economical, long-wearing paint.

Would you like to have materials for a paint test, together with booklet of practical suggestions and color schemes? Ask our nearest office for Painting Aids No. K-28.

NATIONAL LEAD COMPANY

New York Buffalo Boston Chicago
Cincinnati Cleveland St. Louis
San Francisco

(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Co., Pittsburgh)



Visit our exhibit in the Home Builders' Permanent Exposition in the Craftsman Building, 6 East 39th Street, New York. An experienced decorator is in charge whom you may consult free of cost.

when doing your interior 'brightening up':

"In using enamel for finishing (and you are very likely to paint an old desk or table), remember first to apply two, and probably three, coats of flat paint. If you have a good, solid surface on which to apply your enamel, you will not only produce a better effect, but save time and expense, which would be wasted if you had a poor undercoating and were forced to put on several enamel coats.

"In finishing a floor, remember to begin at the corner farthest from a door and work towards your exit, otherwise you will find yourself 'cornered' and surrounded by a sea of wet varnish or stain!

"You no longer need bemoan the fact that the furniture in a certain room doesn't 'match.' The many stains to be had now will closely imitate nearly every kind of wood.

"Time was when varnish turned white if any liquid came in contact with it. Varnish can now be obtained which is perfectly heat and water proof. So, when purchasing varnish, or when your painter is using it, ask if it is waterproof."

Stone Bungalows.

The informality of rough native stone work gives it first choice for the bungalow. A stone wall by itself will not keep out the moisture, so it is quite necessary to have an air space provided; this is done by placing furring strips on the inside, over which goes the interior finish, whatever it may be, says W. H. Butterfield in Country Life in America. The same may be said of brick and concrete. Terra-cotta blocks come with air spaces provided, but even with these it is found necessary to apply some waterproofing mixture, as they are porous and dampness is sure to work through. Stone and brick require no exterior treatment when once put in place. Terra-cotta walls are usually stuccoed on the exterior and plastered on the interior, but frequently the blocks are left exposed on both sides; when carefully laid up and joints smoothly struck, they make a very good appearance. Concrete is not used as much for bungalows as are the other materials. As a rule it is not so cheap. The forms necessary to frame the door and window openings are apt to be complicated and expensive in proportion to the size of the structure. For the man building his bungalow with his own hands, concrete has some advantages. He can learn in a short time to mix and set it, and also can do as little work at a time as he pleases. I know of one man who spent his week-ends last fall and early winter in the country where he was himself building such a house. At each visit he would mix and pour concrete.

Slag for Concrete Aggregate.

Comparative tests of trap rock and furnace slag as aggregate for concrete were recently made by Prof. H. Perrine, of Columbia University. The tests consisted of making compression tests on 8-inch cylinders of concrete, mixed one part cement, 2 parts sand and 4 parts of either Palisades trap rock or slag furnished by the National Slag Company. The rock was separated into ¾-inch, ½-inch, ¼-inch and "dust," and then artificially recombined so that the grading was identical with that of the slag, which was used as received. The materials were proportioned by volume and mixed in a Blystone batch mixer.

When the cylinders were 28 days old they were tested to rupture. The trap concrete showed ultimate strength of 1,769 to 2,120 lbs. per sq. in., averaging 1,975.5 lbs.; while slag concrete showed 2,275 to 2,750 lbs., with an average of 2,465.5 lbs. The former weighed on the average 154.5 lbs. per cubic foot, and the latter 140.6 lbs.

Poured Concrete Houses in Australia.

The construction of concrete houses of various kinds, and more especially those of comparatively moderate cost, by what is known as the "poured" process in connection with the use of moulds is growing in popularity in Australia. A prominent builder in Adelaide erected a large number of houses a year ago, making use of a method which he developed and which has been styled the "monolyte" process. The system is a close approach to that which Mr. Edison brought to public notice some years ago, but thus far the Australian has made use of his system

Have You Noticed

the increasing number of country homes stuccoed in ATLAS-WHITE non-staining Portland Cement? This sturdy, yet, graceful design, for instance, was secured with ATLAS-WHITE.



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only for building workingmen's cottages and structures of that class.

In the houses erected in Adelaide the walls and chimneys are monolithic while the roofs and floors are of strong construction, although floors and ceilings may be of reinforced materials if so desired. The statement is made that by the use of this system a six-room house was finished in ninety-six hours, the cost in Australia being considerably less than brick and almost as cheap as wood.

The "Monolyte" system is said to vary considerably from that practiced by other somewhat similar processes, in that the moulds are of wood with inside faces of iron and stand the full height of the wall. The concrete is mixed dry on the ground and then conveyed by an elevator to flues above the moulds; fed with water and the wet concrete is poured into the moulds in one continuous stream until the walls are filled in.

The mixture consists of one part cement, three parts sand and six parts of ¾-inch stone screenings.

These materials are measured out, then roughly mixed and placed at the foot of the elevator, which, with its endless chain buckets, lifts it to the mixing trough located above the top of the moulds. As previously intimated, the material is elevated to the mixing trough in a dry state and the water is added from a tap which is under the control of an expert concrete mixer.

The moulds are of such a nature that when taken down they may be used repeatedly for other buildings. When removed the surfaces of the walls are scratched with steel combs in order to give a key for the plaster.

The reinforcement for foundations consists of half-inch steel rods all hooked together at points and turned corners. It is stated that for the walls ⅜-inch, 5-16-inch and ¼-inch rods as desired are placed 18 to 24 inches apart, both vertically and horizontally, and wired together at all intersections. These are put together on the ground and lifted bodily into position in the center of the mould space. They are held in place by distancing pieces of the wire at necessary intervals. The houses are plastered on the inside and "rough cast" on the outside.



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Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

Building With Brick and Hollow Tile.

H. R. B.—"We are planning to build a house this year and had intended building a frame, but a friend has told us that we can build a brick with but little more expense.

"He said to lay the outer wall of brick, line with hollow tile and the two are clamped together in same way, then plaster the inside on the tile.

"Could you tell us whether it would be advisable to build in that way, also if a tile roof is a good thing."

Ans.—The building of a brick house you will find costs more than a frame house, particularly where the walls are either solid brick construction or hollow tile with brick veneer. The latter makes a very substantial and satisfactory kind of house. You can get nothing that would be better.

You also inquire with reference to a tile roof, and we would say the same with reference to this. A tile roof is very artistic, permanent and when the tile is properly laid makes a perfectly tight, satisfactory roof. Have you investigated the asbestos shingle, as well as the more recent asphalt shingle, also the Spanish Metal Tile. If not, we would suggest that you look into them before you decide on your tile roof.

To Cool the Attic.

W. K. P.—"I wish to submit to you a small problem of mine, and shall appreciate any suggestions you may make. I am enclosing a stamp for return postage.

"Our unfinished attic is oblong in shape, about 20x30 feet in size. The side walls rise about three feet, the rafters are about 10 feet from the floor, and the ridgepole is about seven feet above them. There are two windows in the front and one in the rear. They are normal size and about two feet from the floor. In the summer the attic is unbearably hot, even with the windows open—due, I presume, to the fact that we have a slate roof.

"Now, I wish to partition off a room or two, using some composition board. Can you suggest any inexpensive way in which I can obtain normal temperature in these rooms? Failing in that, do you think that the circulation of air obtained by breaking through a louver window at either end near the ridgepole would be sufficient to keep down the temperature? Of course, I wish to avoid the expense of this if possible."

Ans.—Your inquiry received relative to the problem before you of securing comfortable rooms in the attic. It seems to us that before you go to the expense of cutting through the roof and locating dormer, that I would try some good insulating material placed between the rafters, or still better, use the insulating material in this way and then put on a covering of wallboard nailed to the underside of the rafters.

This would give you an air space which is a good insulator.

Dampproofing With Hollow Tile.

D. P. W.—"I am writing you to inquire whether or not in your judgment hollow tile with brick veneered wall will be perfectly safe in a damp territory against dampness? I am contemplating building a house and was thinking of putting brick veneered with hollow tile on the inside. Have you had any experience with such a building, and if so kindly give me the benefit of what you have, and oblige."

Ans.—Answering your inquiry concerning subject of protection against dampness in a hollow tile wall with brick veneer, I have to say that the air spaces in the hollow tile will give you a very excellent dampproof wall and you should have no trouble on that score.



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Ans.—Replying to your inquiry as to the best position for your heating plant, I have to say that it is considered a heating plant placed as near as possible to the center of the house, gives the best service. This is particularly true in the case of furnace heating, but you will also find that in hot water heating the "leaders" or the main pipes running from the heater, make best connections with the radiators in the house when the heater is placed well to the center.

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SPLINTERS AND SHAVINGS

A Paint Tonic

By Charles Truitt

A MAN whose bread and butter and motor cars were earned by work largely of a routine kind came to consult a physician who to his knowledge of medicine added a rich understanding of human nature.

The doctor-psychologist looked with keen inquiry tempered with sympathy at his new patient.

"Bored?" inquired the doctor.

"And then some!" exclaimed the patient.

"Don't care whether you live or die?"

"You've hit it; there's no zip in anything these days."

"Been doing the same old work day in and day out, seeing the same people, reading the same newspapers, eating pretty much the same food, cooked in the same old way, in the same old surroundings?"

"You're a mind-reader, Doc!"

The doctor shook his head. "Not that," he protested, "but only that I've had a similar experience myself and recognize the symptoms. I'm going to prescribe for you the same tonic I took—change!"



"Bored?" inquired the doctor.

"A vacation in Europe, I suppose!" snapped Mr. Tired Business Man, with sudden irritability. "That suggestion isn't exactly soothing to a man who can't spare a day from his business."

"I expected something of that sort," rejoined the doctor in his calmest tone. "It was the same with me. I could not leave my patients—my business. But change I had to have and a lessening of friction, the smoothing-out of the mental road, as it were. The train of thought jarred and rumbled and clanked as it ran along in the old grooves. All its wheels were flat."

"Flat! Flat! Flat!" echoed the patient, dismally.

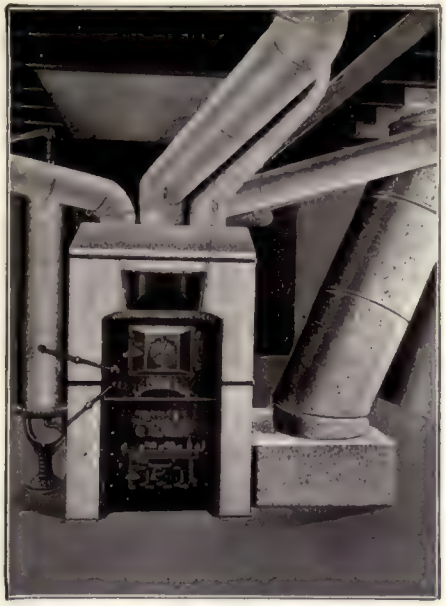
"And so," continued the doctor, "I sat me down to plan to obtain the effects of change where apparently change could not be had. Curiously enough, the mental dullness and physical weariness began to lift from that moment. The mere effort to think along a new line had lifted the train to other rails."

"Get to it, Doc! What did you do?"

"Well, first I got some new clothes. Unthinkingly I had permitted my clothes to reflect my mental and physical seediness. Even the heels of my shoes were run down. Perhaps you don't realize how far a lopsided heel can assist in the slumping process."

The patient glanced at his own heels and grinned appreciatively.

"Brand new, from heels to hat," said the doctor. "I stood on the stoop to give the neighbors a treat. Perhaps my own gorgeousness made me critical of all imperfection or disrepair. I saw that the hedges were not so well groomed as I was, that the fence was not so young as it used to be, and that the house itself



A HESS Welded Steel Furnace showing hot air pipes, air supply and tank heater.

A Ruined Home

is often the result of a badly planned heating equipment. It means cold and draughty rooms,—unequal heating,—too much fuel,—unnecessary labor, and, finally, a state of mind which disturbs the peace and happiness of the family.

None of these for you, if you use a ***HESS Welded Steel Furnace.*** We plan every equipment we sell and we are EXPERTS. We guarantee complete success and let you test the equipment thoroughly IN WINTER WEATHER before we are paid.

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The designs illustrated have real individuality and are the latest styles.

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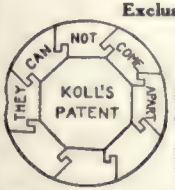
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H. M. Reynolds Asphalt Shingle Company

Originators of the Asphalt Shingle

looked more than a little dingy. Everything had gone downhill with its owner. Or had the owner but unconsciously reflected his surroundings?

"It was a fine opportunity to take the tonic of change. For the next week my little place fairly buzzed with industry, and I was butting into everything. The workmen were good-natured about it, and I was as interested and stimulated as a boy on Christmas morning.

"I could not go to new surroundings, therefore I brought new surroundings to me. Outdoors we were so resplendent that we aroused emulation in our neighbors, whose houses seemed drab by contrast. Painters were busy in our block for the next two months. Indoors, we changed pictures about and shifted furniture and ornaments. Friend wife brought into use some tableware that had been laid aside for years. Incidentally she bought some new clothes herself and did her hair up in the latest style. It



"It brought new surroundings to me."

made her younger and took me back to the honeymoon days.

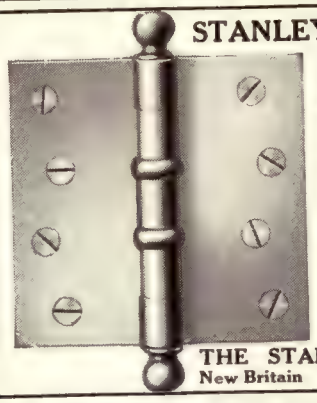
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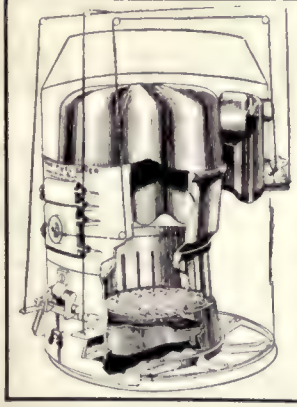
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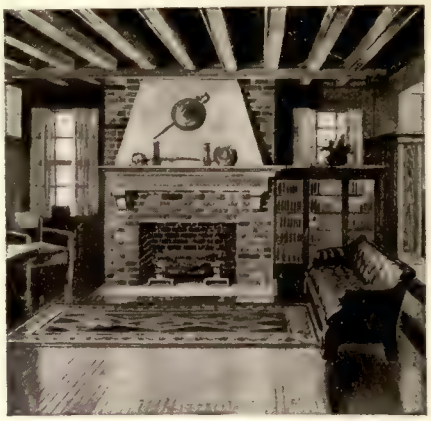
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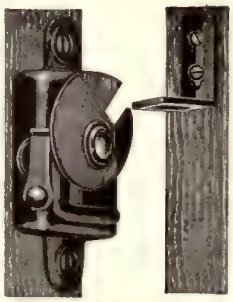
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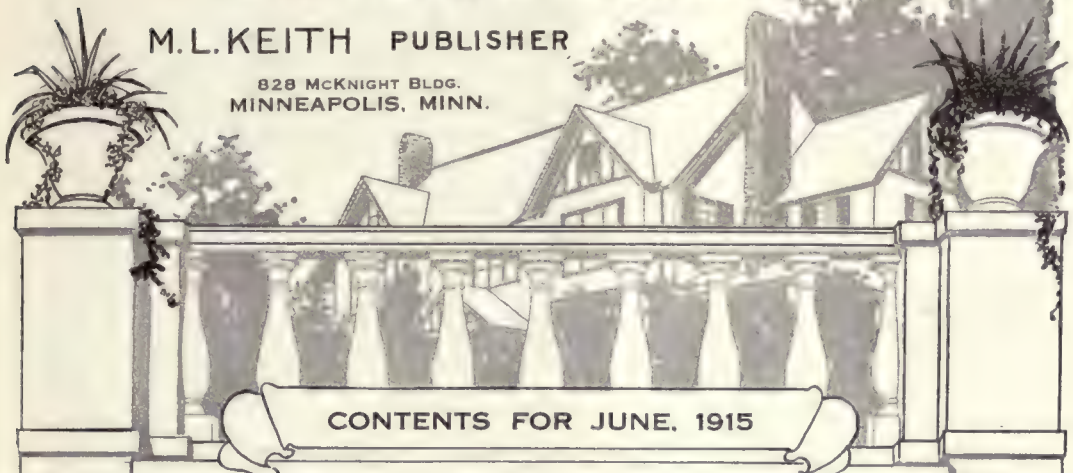
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Residence of Mr. Charles G. Twist, Santa Ana, California, in which a home-like quality tempers plainness of line and surface.

KEITH'S MAGAZINE

VOL. XXXIII JUNE, 1915 No. 6

Homes That Are Built in Santa Ana, California

Henry K. Pearson

WE never tire of looking at the "other fellow's" house. There is a perennial interest in observing the results in different sections of the country, of ideas in building and methods of construction. The advent of building magazines and their wide distribution has contributed greatly to this universal interest. It enables us to compare notes with fellow home builders from Alaska to Monterey.

Without going too far afield, we present here some examples of recent home-building in Santa Ana, California. California is a most fruitful field of inspiration in the line of home building, noted for the variety and individuality of its moderate cost homes. One of the very



Residence of Mr. Ellis Smith, facing an avenue of tall pines. The rose vine trellis shading the big landscape windows on the south.



Front view of the Smith bungalow. A happy combination of rough, gray siding and klinker brick with boulders inset.

prettiest of the smaller cities in this lovely land is Santa Ana, so near the big city of Los Angeles as to have all the latest and most up to date ideas in styles of all kinds, not only in clothes but in houses as well. For 'tis true,—and perhaps 'tis pity—that fashion and style have invaded house building as well as gown building. You can tell how long a house has been built as readily as how old is the gown, from the cut of it. The oldest house in this group has been built only three years; the others only a few months.

We have chosen widely divergent types of medium cost, each full of individual interest and charm. In the first illustration (see frontis), the architect has contrived in spite of rigid lines and smooth surfaces to give to the exterior a home-like quality which tempers the severity of outline. The warmth of the bright red roof tiling adds materially to this livable quality, as the rest of the exterior is all in tones of grey. The wood trim is stained a brownish grey. This simplicity of line and color strikes a note of distinction among adjoining dwellings, which at once lifts this house above the level of more pretentious neighbors. The smooth spacious green lawn in front and the luxuriant growth of vines and roses trained against the high division wall of the grounds, the low stone coping in front, are a lovely setting for the grey walls.

Two views are given of the pretty bungalow a few blocks away, which faces a broad street on the south, lined on both sides with great pine trees—a noble avenue. A large landscape window on the east, opens upon a cement terrace in half circle form. The terrace is enclosed by a brick wall, 6 ft. high. The floor of the terrace is set half way down this wall, which is 18 in. thick and, above the floor of porch and terrace, is built double, with a hollow space 8 in. wide left in the center. This space is used for a box garden and is filled with luxuriant ferns and vines, making a green and feathery border quite around both the terrace and

porch parapets. Many hanging baskets filled with trailing ferns swing in the arched spaces above the ferns, giving an unusual and charming effect of light and airy grace combined with the rustic timber work and klinker brick of the exterior itself. The construction is of a wide, undressed boards, alternating with narrow rough siding, all stained a brownish grey. The roof is of grey asphalt, and the trim is painted white.

Heavy timbers of undressed wood spring from massive piers of klinker brick, forming arched openings around the porch on front and side. The high enclosing wall of this porch and terrace is built of the klinker brick in which are bedded at intervals, rough field stone, with excellent effect. The whole of the east front behind the circling terrace, is occupied by a group of windows—the large, fixed landscape window in the center flanked on each side by small casements which are hinged and open out on the cement terrace. A novel feature is the lattice work to support the Cecil Bruner rose vines that screen the terrace. Broad strips of lattice are bent over like a bower or a floral rainbow. Electric light fixtures, porch lanterns, etc., of verd antique are appropriately used on the exterior.

The interior finish is all of Oregon pine, in a brown mission stain with dull lac finish. Both living and dining room ceilings are beamed and also wainscoted in wood paneling 6 ft. up. Above this wainscot the plaster spaces are paneled with gray grass cloth, its silvery sheen lighting up the room, which would otherwise be rather sombre from being so deeply shaded by the porch. The great chimney breast of reddish brown brick is carried to the top of the room and is flanked by inglenook seats on either side. All the furniture of this room is of wicker slightly stained a very light brown, and is upholstered in tapestry-cretonne, carrying tones of dull red, yellow and brown. The same colors prevail in the large and small rugs of Persian design.



An English cottage which is quaintly charming. Home of Mr. W. H. Spurgeon, Jr., Santa Ana, California.

Of very different type, but quaintly charming is the English cottage shown—

a house near by, which at once attracts attention. The exterior of this house is composed of grey shakes, a very light grey, with roof of darker grey shingles. The trim is white and the exterior chimney in the front, of bright red brick laid up in light grey mortar, gives tone and character to the composition. The effect is enhanced by a clever use of the red brick for the walks and the low broad steps which descend to the street between walls of grey cement. This grey cement wall across the front is capped by a red brick coping, while a grey stained fence of wood palings encloses the grounds at the sides. Roses cover the grey palings with bright color, so that a gay and charming rural aspect is the setting of the cottage. The white casements, small and many-paned, increase the English cottage effect, while large square dormers let into the roof give good chambers on the second floor.



The rear view of Prof. Neally's home.

A vigorous, yet most livable quality characterizes the home of Prof. E. M. Neally, one of the new houses of the year in the environs of Santa Ana.



Home of Prof. E. M. Neally, Santa Ana, Cal. The straight and simple lines of the exterior are very pleasing.

The lines of the exterior, though straight and simple, are pleasing and there is an intimate and personal air which is still more evident when we enter the wide, hospitable oaken door and come into the great living room. This room, thirty-two feet in length, and the hall which is almost a part of the room, occupying the entire front of the home—fifty-five feet. Broad, easy stairs, six feet wide, rise on the hall end to a wide landing four feet up, while the other end is taken up by the "bleezing ingle" whose broad chimney breast of vitrified brick rises to the ceiling.

It is an interior that spells comfort and refinement and broad, open spaces. Here is no cramping but plenty of breathing room. Even the bath room is twelve feet square and the joy of this bath room is plenty of hot water, night and day. The Automatic Water Heater which supplies this luxury is a jewel among heaters, as it does its work at a cost of not more than 20 cents a month for gas.

It is, in short, a home to conjure with; to conjure happiness and serenity and high living.

Furnishing with Willow

Una Nixon Hopkins

OF all inventions in the way of furniture, that of willow is the most satisfactory from an artistic, economical and utilitarian viewpoint. It is a great pity that even more of it is not used, so much is it to be preferred to furniture made of poorly finished woods. And contrary to most other kinds of furniture, it finds a consistent place in almost every home, somewhere, be it a great or small one.

There is quite a fashion at the moment for furnishing the small house practically altogether with it; that is, the main rooms, which might include besides the living room and dining room, a sun room, perhaps, and a porch.

In a living room where the preference is for more than one kind of furniture, the willow combines admirably with either mahogany or oak, and may be stained to match the general tone of any room. And best of all, it is charming with cretonne and chintzes, for where reasonable taste is displayed, a room in willow and chintz is bound to be pretty and homelike. It is very rarely that a piece of willow furniture is badly de-



A large entrance hall in wicker furniture with cretonne hangings.



A dining room in wicker and chintz.

signed, and its wearing qualities with ordinary use are equal to furniture more substantial in appearance. And while it is not cheap, for really good things are seldom that, excellent examples of chairs, tables, settees and what-nots may be bought at moderate cost, though in this as in other furniture there is a long range of prices and styles to choose from.

An inexperienced home-maker will find little difficulty in making her house attractive with this furniture for the reason that even in its natural color it is adaptable to any room, whatever the wall tone, and it at once suggests simplicity, which is difficult for the inexperienced to attain.

It would seem at first thought that there might be a tendency to monotony in furnishing with wicker, but this is seldom true for the shapes, color and make are almost as variable as in pieces of wood. Chairs and couches can be made to look quite different in winter and summer, for in summer these pieces may be cushioned with gay light material and in winter with something heavier, at least in color if not in texture. Aside from cretonnes and chintzes, linens and that staple, India cottons, are excellent with willow, and come in all combinations of colors.

Among the items to be set down in favor of this furniture is the fact that it is very easy to move, and in this day when so many women are looking after their own households it is an important item. There are, too, many light accessories made of willow work that help out tremendously in furnishing a room. For instance, there are good lamps, though beware of some ugly ones; domes which hang from the ceiling, and when lined

with silk modify the light; pretty baskets, some suitable for holding flowers and ferns and others designed as ordinary scrap baskets. And for the tea room there are all sorts of pretty tables, wagonettes and trays, even tea caddies.

The hall illustrated is even more pleasing in "life" than the photograph shows it to be. The woodwork and walls are deep cream color with cretonne hangings at the doors and the French windows which go into the garden. The body of the cretonne is cream color with a design in dull old blue and old rose, and the carpet is dull blue with enough gray in it to give it a silvery tone. All of the furniture is willow here, and the chair cushions are in dull blue and cream color. A good many ferns, and bowls of pink roses, when they are in season, make a most cheery room.

The little dining room shown is as gay as the flowers outside the window, with its hangings of rose and white chintz, for the two sides toward the garden are given up to windows. The pieces of furniture here were carefully chosen relative to the size of the room; a pretty little buffet with drawers just fits a space beneath two windows, the table will seat four comfortably, and the chairs are comparatively small. A plant stand in front of a large window gives a fortunate opportunity to introduce some of the pink geraniums into the room that bloom in the garden, which is a clever scheme. The chintz of the curtains is used for cushion seats on the chairs and "rests" at the back, and on the table, beneath the glass, a piece of green linen is bordered with the chintz stripe. Beneath the table is a green grass rug. Wall spaces and ceiling



Wicker furniture is charmingly appropriate in this living-sun-room.

are tinted cream color, and to add to the charm of the room the china is decorated with sprays of rose flowers with green leaves. It might be called a garden room, for one more like a garden would be hard to imagine.

The living sun room has gray walls with hangings of pale gray and yellow flowered linen. It is by far the most liv-



A cool and comfortable spot in which to spend an afternoon. Furnished in wicker and rattan.

able room in a very livable house, so cheerful and airy does it seem in its pretty light dress. Everything is willow, even the flower holder and the lamp on the substantial reading table, in fact it would be difficult to find anything else quite so appropriate.

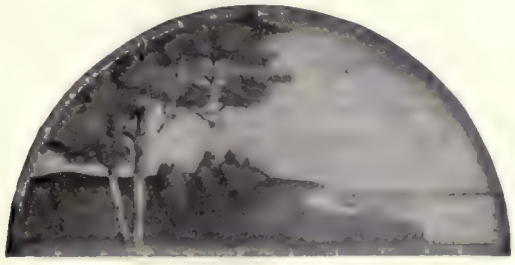
Porches, nowadays, are for the most part fitted up as outdoor living rooms, and here willow is very suitable. Frequently rattan is used in place of willow for porches, rattan being the product in a natural state before the hard outside is stripped by machinery. It cannot be stained, but it is the more durable of the two for exposed places. There are reclining chairs made of it, big arm chairs, little arm chairs; in fact, all kinds designed to suit Mama Bears and Papa Bears and all the little Bears of the family, and all the family friends; or, in other words, no end to the variety.

For the sun room nothing quite takes the place of willow, for heavy furniture seems inconsistent with these light, airy places. In our photograph of a sun room, there are no draperies at the windows, which is certainly a wise omission. The room is in the house of a physician, and he no doubt appreciates sunshine more than the individual who is not so often



The omission of curtains at windows makes this truly a sun-room.

made to realize its importance. In this instance the wicker is stained mulberry and the coverings for chairs and couches show a design in this same color on a cream background. The sun room opens onto a porch at the side, also willow furnished, which makes for pleasing harmony in addition to comfort. There are different ways of staining this furniture so as to make it agree with the color scheme. Wood stains may be used; oil paint diluted with turpentine and oil, or in place of turpentine kerosene gives good results, and where the furniture is to be used on porches it can be painted, care being taken that the paint is not too thick. The paint leaves a glossy finish easy to keep clean.



The Home Touch with Vines and Shrubs

M. Roberts Conover

EXTERNALLY the house is merely a structure until the thoughtful, loving arrangement of vines, shrubs, lawn and trees reveals the interest of the human life it shelters. And it is not self-interest merely. There is hospitality where a home is friendly to vines and shrubs and flowers. It is as if the home-livers say: "We love beauty and we love our home." And to this every intelligent person responds in feeling, "You are one with us, for we too love beauty and we love our homes."

The outward beauty touch is therefore an important social link and no real home-maker can ignore it.

The shrub and vine planting should be schemed out when the house is in building or even before. Thus the severe "newness" is sooner overcome.

Illustration (1) shows a stucco house on upper Broad St., Red Bank, N. J. Vines and shrubs were planted as soon as the progress of the building permitted. (The picture was taken soon after the house was built.) Dwarf evergreens and clipped privet are used to give friendliness to the entrance and a low screen about the veranda which in winter is a sun room.



The photograph was taken soon after the planting of vines and shrubs.

The ivy upon the walls is Boston ivy.

Illustration (2) is a photograph taken about two years later. The ivy almost covers the north wall of the dwelling and is used also on the garage.

This house is in the choice residence



Two years later—the same house nearly covered by Boston ivy. Note how the windows and doors are framed.

section of a country town. This corner plot makes effective the unique and kindly location of the entrance. The owners have not deemed it wise to border the walks or grounds with hedging and the result is warm and hospitable. The parking strip between the sidewalk and curb is planted at intervals with single plants of California Privet closely trimmed.

In illustration (3), privacy is given to the lawn by the use of a pergola and low hedges. The vines used to shade the wings of the pergola are honeysuckle (Hall's Japan Honeysuckle), which blooms at intervals throughout the summer and is almost evergreen.

The use of a few evergreens near the street is pleasing and the low privet hedge which borders the walk separates the drive from the lawns.



These beautiful grounds were made possible by the use of vines and shrubs.

Attack the Attic

The Solution of the Extra Bedroom Problem—How the Attic Can Be Converted into Extra Bedrooms with Slight Expense

William B. Powell

FEW indeed are the home owners who do not need an extra bedroom. You have probably often planned how you would gain this extra chamber by adding a wing on your house or by saying vaguely that you might fix up the third story—("attic" is fast becoming an obsolete word in these days of modern house building). But you put off the former because "you didn't have enough money just then" and put off the latter because you thought it would take too much trouble, and perhaps money, to make your third floor into a bedroom or rooms.

Well, it would if you have in mind bedrooms such as are in the third floors of your friends who have built new houses. As I said before, there are no real "attics" in the modern house. It is finished throughout in just the same way and the top floor is just as well lighted, ventilated and fixed with plumbing as is the first floor.

But if your aspirations are not too high and if you want and need extra bedrooms that are attractive as well as comfortable, attack your attic and have them. I'll suggest how to go about it. In the first place, throw out all the rubbish which



A combination writing desk and dressing table built around a chimney in an attic chamber.

has in all probability been accumulating there for years. Clean and scour the walls, floors, and woodwork before anything else is done.

Your attic is now ready for its paint. And paint you will find to be the most valuable asset in your work of rejuvenation. Paint the floor. The wood is in such poor condition that it would require much work to properly varnish or stain it. But you can paint it in any one of a dozen attractive colors. It is often good to use a dark color which predominates in your chintz hangings (which I shall tell you about) on your floors, woodwork and furniture.

Right here let me advocate the use of black paint. Don't think this a horrible idea—it is wonderfully attractive if used properly—and bright too! Of course you would only use it on floors, woodwork, and furniture. The walls and ceiling painted a light color, bright hangings and rag rugs, and designs painted on the furniture will give ample coloring. The very fact that you use black, will allow you to use much brighter colors than you might have otherwise. You know painted furniture is coming back into favor at a rapid pace and this will help you in fixing your attic room. You may take an oak table, maple desk, and cherry bureau and if painted all one color they will form a fine new set. The old fashioned painted sets usually had a background of dark green or black with some stiff conventional flower design painted on them. If you don't care to take the time to do this work, paint your odd pieces a lighter color or else stick to the good old standby—white. I am not advising staining because it takes more time and trouble than painting and for an attic bedroom, does not give any better results.

Now for the walls. Paper is usually out of the question. The walls are so often slanting that painting is much more satisfactory for many reasons—it has no design to be disturbed by the slanting lines, does not fade, is more sanitary, and can be washed. This last point is especially important because you should use a very light color on account of the small windows and poor light one usually finds in the attic. And if you use a light-colored flat wall paint, it does not matter if it gets dirty because it can be washed. If you don't select an ivory white or cream, use a yellow, pink or warm light



An attractive little room that would satisfy most of us.

gray. Blues and lavenders are too cool for the average attic room.

Having done all your painting, select a bright, cheery chintz or cretonne for your hangings.

You will want your window hangings very scanty—just a flounce across the top and pulled far back at either side. If your windows are a-plenty, you might used for the window seat coverings. The second illustration shows an attic room where more care has been given to the finishing. The woodwork has been stained and rubbed dull to conform with the mission bed. To make the most of the space in this small room the seat was made as part of the bed. The simple bright rugs, chintz curtains and coverlet



The free use of white paint is recommended when finishing attic rooms.

have thin net curtains, otherwise I would be content with the figured ones.

The illustrations show some interesting features of attic bedrooms. In the first one you see a chimney which has been utilized as a desk on one side and as a dressing table on the other. A mirror hung on the chimney and the ample shelf are all that could be desired for one's toilet. You will note that the generous use of white paint has done much to brighten this low-ceilinged and small-windowed room. Bright chintz was give the necessary coloring and contrast to the dark wood in this room.

I don't pretend that the bedroom pictured in the next illustration is particularly attractive. But it is clean, bright and useful. If one of the boys can't use such a room, at least any servant would welcome it. White paint made it possible. A large airy bedroom on the third floor is surely preferable to cramped quarters on the second and we all know this exists in a great many large families. The last view shows an attractive

way of treating the very low ceilings of a sloping attic room. An exceedingly cosy corner this—the tiny window giving the writer just enough of a bird's-eye view to inspire him at his work. The remodeler of this attic room liked to do stenciling so she did an attractive, simple design on her curtains, and painted a stencil around the floor as a border.



Certain pieces of furniture will fit in corners with low ceilings as in this cozy-corner.

Possibly you are adequately provided with chambers, but are without a convenient place for the children to play in. If so, fix up a nursery, in the attic where they can have their toys and games and can play without disarranging the whole house and disturbing the older folks.

The next time you wish you had an extra bedroom, or nursery, decide you will have one. Remember that your attic can be converted into such with little trouble or expense—so get up your nerve and attack the attic.



Welcome the Birds to Your Grounds

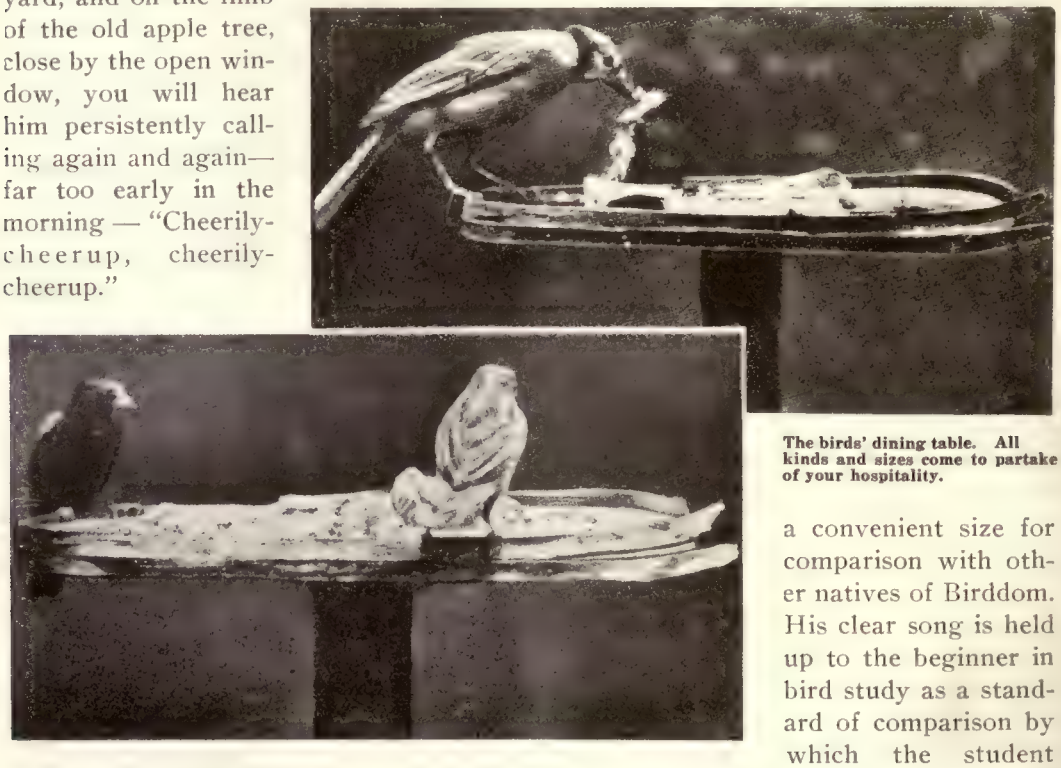
B. H. Hermine

"The bird for all Nature chants the morning hymn and the benediction of the day. He is her priest, and her augur, her divine and innocent voice."

—MICHELET.

IF you have any sentiment left in your soul, at the mention of his magic name, you will fly away with Robin Redbreast to the land of your lost youth, where old-fashioned sweet smelling flowers bloom in the door-yard, and on the limb of the old apple tree, close by the open window, you will hear him persistently calling again and again—far too early in the morning — "Cheerily-cheerup, cheerily-cheerup."

Put to the test at a dinner recently not one of the diners could depict Mr. Redbreast in a way to set him apart from his bird fellows. And yet, Robin Redbreast is the most common and familiar of our birds, recommended by ornithologists as



The birds' dining table. All kinds and sizes come to partake of your hospitality.

a convenient size for comparison with other natives of Birddom. His clear song is held up to the beginner in bird study as a standard of comparison by which the student may learn to distinguish the songs of other species.

Besides being a general good fellow, Robin is a most useful and industrious citizen. Mrs. Robin demands very fine grasses with which to line her cozy nest,

Is he not worth saving for his beauty and good cheer, alone?

Could you recall to mind and describe, accurately enough for identification, Robin Redbreast, the cheerful companion of everybody, everywhere?



A wren house placed on the side of a garage.

and when the baby Robins arrive, they have such enormous appetites it keeps both Mr. and Mrs. Robin on the jump to supply their steady demand for fresh earthworms.

The robins include in their daily menu, white grubs, beetles, cutworms, grasshoppers, crickets, moths, ants, wasps, caterpillars, larvae of the gipsy-moth, the brown tail moth, the forest-tent moth, canker worms, leaf-eating and wood-boring beetles, wireworms and army worms. It has been noted that when robins are scarce, the army worm advances, and on the coming of numbers of the robins, the army worm disappears.

Most laborers ask more than board and lodging for their toil. For all his useful services (for which Robin asks only food and shelter, and hustles these for himself), some selfish and ungrateful folks begrudge the faithful little worker the bit of fruit he gathers now and then for himself and family. Uncle Sam is authority for the statement that the industrious American robins really prefer wild fruit when they can get it, and advises the man who wants his orchard free from insects, to allow a few trees for the birds or plant some wild mulberries for these profitable tenants of field and orchard. The Russian mulberries, which ripen the same time as cherries, are preferred by the robin family to the cultivated fruit. It is a very simple matter to attract this jolly little songster and many other birds to your dooryard, but of course they won't come without encouragement. A very good free lunch counter can be made from the lid of a cheese box, which any grocer will be glad to furnish you. The rim should be pared down to about the width of an inch so that smaller birds, as well as Robin, will not be too much hidden from view. The lid should then be nailed securely to the top of a stout stake driven well into the ground.

Standing well out of harm's way.



A quaintly attractive design in bird house architecture.

I know of nothing that will bring more joy to the heart of the bird-lovers than the sight of a genial company of chickadees, juncos, titmice, or the heavier birds such as robin, blue jays and woodpeckers which will gather daily at the "festive board" upon which has been spread bits of boiled potato, sodden bread, cracked corn, rice, nut meats and trimmings from meat and suet. The same birds will return day after day to partake of your hospitality.

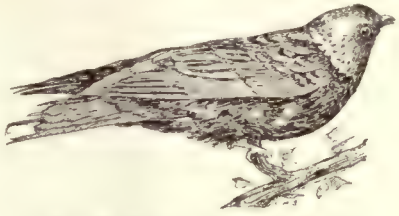
Bird houses, providing shelter, can be made at practically no expense and your time and effort will be amply repaid by these jolly little tenants. Illustrated here are several bird houses on the grounds of a Minneapolis lawyer, who is a lover of birds and who has shown considerable ingenuity in constructing bird houses out

of materials that were at hand. In the center is shown a house whose roof is an old chopping bowl. It is hung by a chain from a limb of a tree, ten or twelve feet from the ground. Others are shown suspended on poles, where the young birds will be safe from cats and squirrels, an important consideration in placing your house.

The little wren houses are placed on the side of the garage. These birds delight in nesting as closely to the house or building as possible and do not seem to be disturbed by the children playing about. On these same grounds these house wrens have built nests in the pocket of an old coat hanging in the garage and at another time in a paper bag on a shelf.

No modern up-to-date bird house is complete without a bath, which should be placed up out of the reach of prowling cats or dogs for of course a bird is at a disadvantage with its plumage wet. Inexpensive ones can be made of cement at the time of building or they can be obtained from the manufacturers at small cost.

A very unique rustic bird bath was made from a good sized maple tree, which had died and was cut off about three feet from the ground. In the top of the stump that was left standing, a carpenter with chisel and hammer hollowed out a shallow basin, leaving about a two inch rim of wood encircling it. From the bottom of the basin near one edge, he bored a slanting passage downward with a lower opening in the bark not far from the ground.



The jolly, friendly, purple Martin will keep a place free from mosquitos.



Robin red-breast, a good fellow who rids field and orchard of insect pests.



A unique rustic bird-bath.

The carpenter went his way and the bird-lover took up the task, —fitting corks to both ends of the circular drain; putting a few pebbles into the bottom of the basin, with one larger stone to one side; planting a rosebush to one side of the stump; filling the basin itself with water, and lo, when she had finished, the tree which could no longer shelter the birds in the branches became for them a pool to bathe in. And they adopted it. The basin, flushed out every day and refilled with fresh water, was as clear as any brook. The large pebble was a wharf. The rosebush was a springboard. There was nothing more that any bird could wish.

Last fall when the birds were going south, a flock of blue-birds made this bird-bath their headquarters for several days. In twos and threes they perched on the stump, swayed on the rosebush or fluttered in the

air above, waiting their turns for a splash in the basin. They were as blue as the sky above them and as they swayed and poised and splashed, they made a more wonderful moving picture than was ever run off a reel.

Begin this morning, this afternoon, or at least TODAY to attract birds and you will never lack company or entertainment. They will repay with lilting song and heartening chatter, the kindness of those who give them cheer.



The Robin Knew

Helen M. Richardson

The sunless sky was dull and gray,
  The trees were gaunt and bare;
Winter bedecked in somber hue
  Seemed round me everywhere—
Until, up in a leafless tree,
  With modest, folded wing,
Yet all a-quiver with delight,
  I heard a robin sing.

He heeded not the untilled fields,
  The brooklet's sluggish flow;
And where my eyes saw barrenness
  He sensed the sunlit glow
Of flowery ways and trees abloom,
  Where soon his nest would swing.
The robin shamed my weaker faith—
  He knew 'twas time to sing.



The Up-to-Date California Bungalow

George Palmer Telling

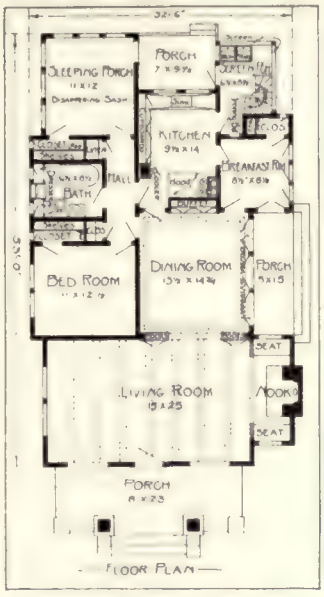
THE original bungalows of India bear so little resemblance to the present day bungalows of southern California that if the dwellers of that mystic land were to be transported to the latter place they would, in all probability, fail to recognize, as such, the bungalows which they would inevitably see. It is true that in most cases some of the original characteristics have been retained. For instance, the long, low appearance, large porches and wide projecting roofs.



"Ocean View," a bungalow that anyone might well feel proud to own.

The original bungalows were of very light construction for the simple season that protection from cold was unnecessary in the hot climate of India. Early California designers and builders worked along similar lines. Bungalows were built without studding, the walls being made of boards placed vertically and close together, forming walls and frame at the same time. Narrow strips or battens were nailed over the crevices both inside and out; a low pitched roof and a few other requisites were added and behold, a bungalow! This type of bungalow is frequently built even at the present time and is quite adequate in warm climates and for summer camps; but, like its progenitor of India, it is entirely unadapted to the requirements of an all-

the-year-around residence in the more rigorous climates. In the modern bungalow these light walls have been replaced by almost every known kind of building material such as concrete, brick, brick veneer, cement blocks, stone and the more common form of studded walls with exteriors of shakes, shingles, stucco, etc. This stability of structure has been followed from foundation to ridge so that the bungalow of today is capable of withstanding the climatic conditions of the most rigorous climates of the inhabited world.



Floor plan of "Ocean View."

While there has been a great change for the better in stability and climate-resisting qualities there has been a greater change in design, so that at the present time there are several different types of bungalows, all of which bear a similarity to each other. These types are combinations of the best features of the various styles of the world's architecture. Those which we are illustrating, herewith, bear so strong a resemblance to the Chalets of Switzerland that it is quite applicable to term them "Swiss Bungalows." The Swiss style is very much modified and toned down in these designs; but at the same time is quite noticeable in the wide projection of the roof, the timbering, etc. But best of all they have the convenience of arrangement, the built-in features, the great number of windows and the low home-like appearance which characterize the up-to-date California bungalow and which have won for it a world-wide popularity.

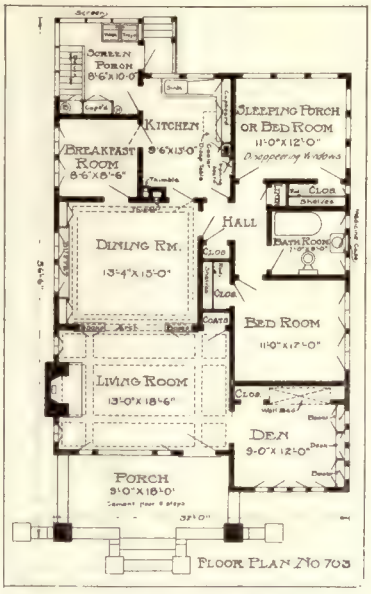
"Ocean View" is a bungalow that any-



"Woodland Bungalow" on attractive and distinctive lines.

one might well feel proud to own. The roof is of white composition, pitched moderately low and the projection at the gables is variable, being widest at the ridge and gradually diminishing towards the eaves. This may be seen in the side gables in the picture.

The chimneys and porch work are of cream colored pressed brick which give a delightful touch to the bungalow. The walls are covered with shingles above the belt course on level with window sills and with short, sawed shakes below. The dining room is very large and has a nook or cozy corner at the end. The location of the hall is such as to give access to the bath and bed rooms direct from the kitchen as well as from the dining room, which is a great convenience. The breakfast room is provided with a closet so that it could be used as a servant's room if desired.



Floor plan of the "Woodland Bungalow."

With hardwood floors in the three main rooms and with a small cement cellar this bungalow would cost about $2,600.

"Woodland Bungalow" was designed to meet the demand for an inexpensive, seven-room bungalow and fully meets the requirements. It has seven rooms, screen porch, bath and cement basement for furnace and fuel.

The arrangement is uncommonly good. A central hall connects the bed rooms and bath room with the remainder of the rooms either by way of the dining room or the kitchen, which is a great conven-

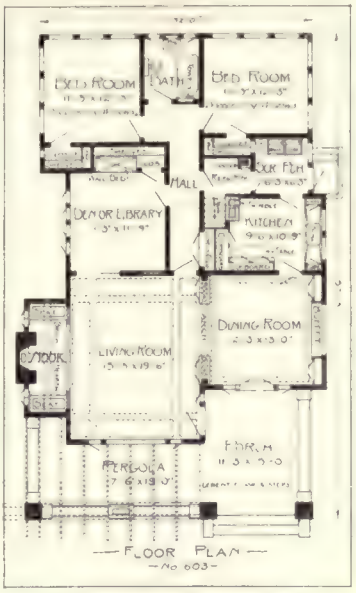


"La Casa Bonita" something "just a little different" in bungalows.

ience for the housewife. A wall bed in the den and an adjoining closet make this room convertible so that it may be used as either bed room or den. Book cases and a desk are built along one side with short windows above.

A coat and hat closet opens off of the living room and book cases are built in the buttresses of the arched opening between the living and dining rooms.

There is a large buffet of beautiful design in the dining room and an attractive brick fireplace in the living room.



Floor plan of "La Casa Bonita."

The rear bed room or sleeping porch is equipped with "disappearing windows." These windows are three feet in length and are opened by dropping the sash down into the wall below. They are balanced with window weights, making them easy to operate and when open are hidden from sight. When all of these windows are open the room becomes a sleeping porch with this advantage over the ordinary sleeping porch, that a portion of the windows may be closed so as to regulate draughts or all may be closed if required in cold or stormy weather.

There are oak floors in the living room, dining room, breakfast room and den.

The exterior has distinctive bungalow lines and is very attractive. The roof is of light gray composition and the walls are of shakes laid in a very pretty pattern. Gray cement stucco was used in the front porch and chimney work and they are trimmed with red brick forming a pleasing color contrast. This attractive bungalow could be built at the present time, complete and ready to occupy for about $2,650.

"La Casas Bonita" does not need this pleasant sounding Spanish name to make it attractive, for it is extremely attractive without the name; but it does add one more to its many other distinctive features. While its exterior appearance is distinctively bungalow, it is odd enough to meet one's desire for "something just a little bit different."

A careful study of this floor plan will well repay the prospective home builder. There are six rooms, a delightful nook, a screen porch, cement cellar and a very large front porch. As may be seen in the picture and the floor plan about half of this porch is covered with the room and the other half with pergola beams.

A wide brick hearth forms the floor of the nook and is raised about four inches above the living room floor. At each end of the nook is a broad comfortable seat, built for service as well as for appearances, and a large brick fireplace occupies the central portion of the outside wall.

A wall bed is provided for in the den so that it may be used as a bed room if desired. Both bed rooms are equipped with "disappearing" windows.

The kitchen is not large, but to add to it would be but to add to the housewife's daily steps. It has a large sink case, abundance of cupboards with flour bins, etc., and a disappearing kitchen table.

This gem of bungalows built as described, piped for furnace and with hardwood floors would cost at the present time about $2,800.

Another Planting Plan for a Forty-Foot Lot

Wyman P. Harper, Landscape Architect

MANY houses are built with only a small space between them and the public sidewalk. The owners of others wish for such a vegetable garden as a lot permits. The planting plan illustrated is adapted to both conditions, and is complete enough in its detail so that, given the same conditions, an owner can mark out and dig his planting beds, order his plants and do his planting.

The writer is an admirer of a good vegetable garden and approves by all means of a vegetable and fruit garden somewhere even in the front yard if necessary, as we sometimes see, if there is no other place. It is safe to prophesy that as the American people become more familiar with gardening methods they will use gardening not only as a decoration but make it as utilitarian as it can be made at the same time.

The space left from this forty-foot lot after the garden is taken off and the house built is not large and taxes the designer's skill more than a larger lot would do. If one looks south out of the windows toward the adjoining lot, it is apt to be against the kitchen windows of the adjoining house. This is modified by putting a large-growing shrub straight in front of the window so that it will catch the eye first. If one looks out of the front window toward the street, one is confronted by the dirty gray of the pavement. To modify this, a shrub is put similarly in front of the front window and if possible, a mass of low planting in the parking between the sidewalk and curb. For the latter place, shrubs should

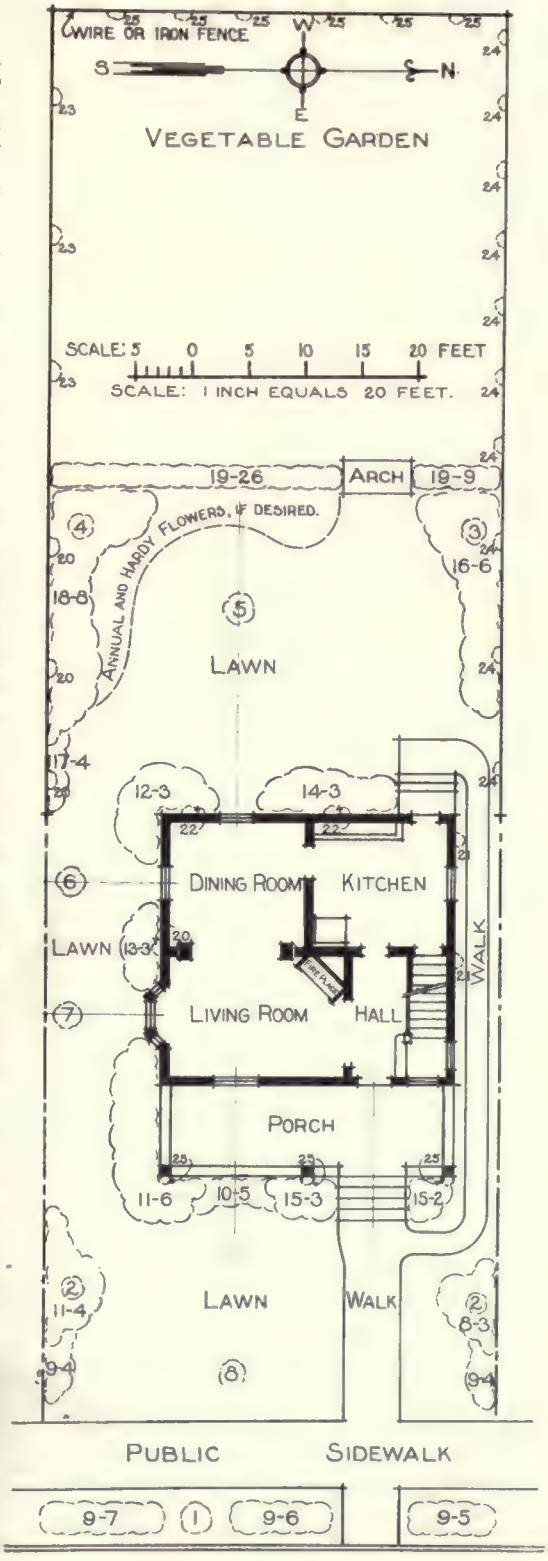


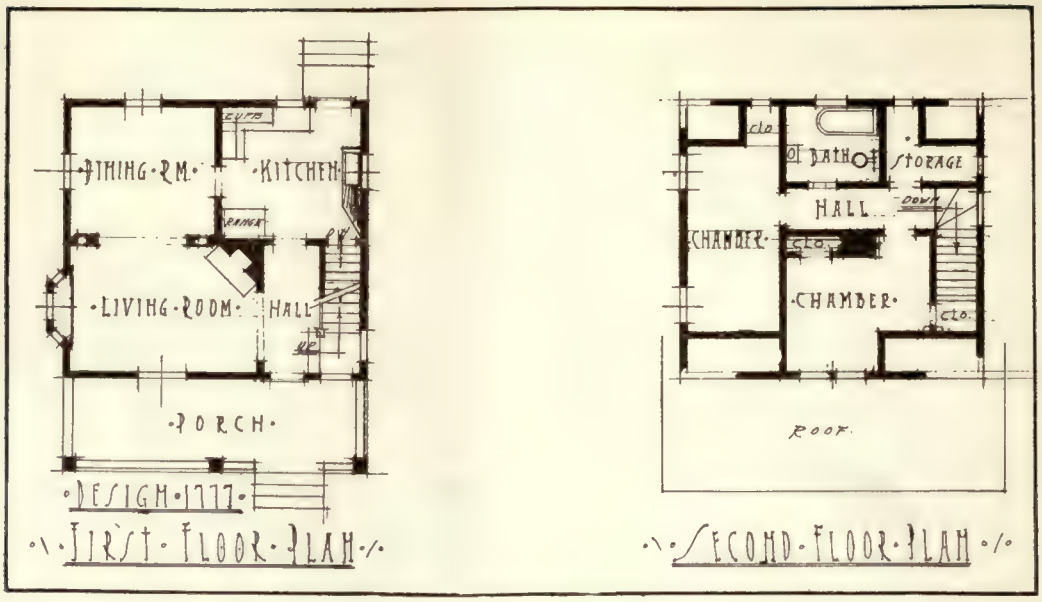
The narrow lot offers many difficulties but is very successfully treated here.

Planting List

1. American Elm (Ulmus Americana), 1 plant.
2. Mountain Ash (Sorbus aucuparia or S. Americana or S. quercifolia), two plants.
3. Catalpa (Catalpa speciosa) or (for St. Louis and South), Bechtel's Crab (Pyrus Bechtel), one plant.
4. Lombardy Poplar (Populus Italica), one plant.
5. Buckeye (Aesculus glabra) or (for St. Louis and South), Sweet Gum (Liquidambar styraciflua), one plant.
6. Cranberry (Viburnum Opulus), one plant.
7. Mock Orange (Philadelphus coronarius), one plant.
8. Bridal Wreath (Spiraea Van Houttei), four plants, 4 ft. apart.
9. Japanese Barberry (Berberis Thunbergi), 26 plants, 2 ft. apart.
10. Wild Rose (Rosa Arkansana) or (for St. Louis and South), Spiraea Anthony Waterer, five plants, 2 ft. apart.
11. Bush Honeysuckle (Lonicera Tatarica), 10 plants, 4 ft. apart.
12. Persian or Rouen Lilac (Syringa Persica or Chinensis) or (for St. Louis and South), Deutzia (Deutzia crenata fl. pl.), three plants, 4 ft. apart.
13. Weigela (Diervilla rosea) or (for St. Louis and South), Snow Garland (Spiraea Thunbergi), three plants, 3 feet apart.
14. Yellow Flowering Currant (Ribes aureum), 3 plants, 4 feet apart.
15. Snowberry (Symphoricarpus racemosus) or (for St. Louis and South), Regel's Privet (Ligustrum Regelianum), five plants, 3 feet apart.
16. Siberian Dogwood (Cornus Sibirica), six plants, 4 feet apart.
17. Indian Currant (Symphoricarpus vulgaris) or (for St. Louis and South), Dwarf Deutzia (Deutzia gracilis), four plants, 2 feet apart.
18. Common Lilac (Syringa vulgaris), eight plants, 4 feet apart.
19. Hedge-Bridal Wreath (Spiraea Van Houttei) or (for St. Louis and South), California Privet (Ligustrum ovalifolium), 35 plants, 1 foot apart.
20. Japanese Clematis (Clematis paniculata) or (for St. Louis and South), Wistaria (Wistaria Chinensis), four plants.
21. Bitter Sweet (Celastrus scandens), two plants.
22. Woodbine (Ampelopsis quinquefolia) or (for St. Louis and South), Trumpet Vine (Bignonia radicans), two plants.
23. Wild Grape (Vitis riparia) or (for St. Louis and South), Actinidia (Actinidia arguta), three plants.
24. Climbing Rose—Dorothy Perkins or Tausendschon, 10 plants.
25. Climbing Honeysuckle (Lonicera sempervirens) or (for St. Louis and South), Hall's Honeysuckle (Lonicera Halliana), nine plants.

The first number in a plant bed indicates the kind of plant; the second number indicates the quantity of that kind in that area. Circles represent individual plants, half-circles represent vines.





be used low enough so as to be no obstruction to the view of drivers of automobiles. The little Japanese barberry is a favorite plant for this position. If one looks out into the rear yard, the space over which one gazes is again very short, and is the occasion for planting the small tree in front of it backed up by the garden hedge. Each of these obstacles, however, will cause the yard to seem larger than would otherwise be the case, no matter how strange this may sound.

The smallness of the lot is a reason for planting closely and abundantly about the house, for that is about the only space left in which to plant. Being so conspicuously in view and not surrounded by an abundance of green lawn, the house needs all the more the modification that planting gives and the better connection with the ground and other objects. The little rear yard, however, may be as cozy as a much larger yard, and if the grass is well kept and the shrubs make a strong screen, it may seem as "far from the maddening crowd" as will be beyond belief.

There is here a greater importance of good care to the plants than is true with a larger place for every plant plays so large a part, one doing as much work in decoration and seclusion as a dozen in another place and doing it as effectively. It pays therefore to give the shrubs the cultivation and water that one would give one's cabbages and lawn and to strive for the perfection of each plant, since each means so much to one.

As was pointed out in the March number, the first essential to a perfect planting is hardiness and good health and this is the more true, the smaller

Estimate of Cost

1 large growing tree	$ 2.00	
5 small growing trees, at $1	5.00	
144 shrubs and vines at 25c	36.00	
10 per cent extra for freight and packing	4.30	$47.30
Preparation of Plant Beds: (Omitting black soil and clay if necessary.)		
1 man digging 950 sq. ft. plant beds 4 days at $2	$ 8.00	
1 man planting 1½ days at $2	3.00	11.00
		$58.30

the planting. In order to add to the seclusion of the rear yard while protecting the garden from dogs and chickens, a strong wire fence covered with vines is advisable, ending even with the rear line of the house. The vines should be plentiful, otherwise no adequate screen is made and a thin screen is almost as bad as none. Instead of the vines mentioned, which are most of them strong-growing, strong-growing annual vines can be used. Indeed that is true of the shrubbery also, that annual plants of somewhat the same size may be substituted. When one first begins to take an interest in the outside decoration of the home, the first attempt is often with annuals. One finds, however, that annuals require more care than shrubs and that they have to be newly planted every year, which means newly preparing the ground also, while giving no effect during the winter as a shrubbery planting ought to give. If such a planting as the plan shows is not almost as satisfactory during the winter as for the summer even though it bears no evergreen leaves, the plan or the planting is at fault. Hence all the more reason for perfection of form in the individual or mass which is the quality that gives winter enjoyment.

For methods of preparing plant beds and planting, see the February number.

A Homebuilder's Mistake

A CLOSE comparison of this design and the foregoing one will reveal a house identical in size, arrangement of rooms, same interior and quite similar materials used in the exterior treatment; yet how vastly different in their appear-



How vastly different from the design shown on page 448, although as to size and treatment they are almost identical.

ance from an artistic standpoint.

This house was put up by a contractor without the aid of carefully prepared plans. The interior arrangement is the same but the dormer on the roof could not be called a thing of beauty. Octagonal in shape would make it cost fully as much as the gable on the foregoing design, which in this plan is placed in the center of the roof where it belongs.

The roof is the gambrel treatment in both cases and the pitch is the same, but the belt course in the one is brought down on a line with the main cornice. In this case the cost is not increased, in fact it should be reduced as in the above design it is necessary to furr out. This leaves a wide window sill which, with a driving rain, is apt to leak unless properly flashed. The appearance speaks for itself.

The porch columns are square and the balustrade is closed and paneled, making it much more practical for screening.

The material in both cases is a combination of cement plaster over metal lath and shingles.

In the one case the owner has saved the nominal cost of architect's plans, which when compared to the whole cost of the building is a very small item indeed when one stops to consider the results obtained. He does not realize this until after it is too late or he comes to sell. Then he hears remarks of the exterior appearance even though the interior is identical; he must sacrifice and lose from one hundred to five hundred dollars, where the cost of the two houses should be the same.

Attractive planting of shrubs is another investment well spent.

Homes of Individuality

Selected by Walter J. Keith, Architect

THE first bungalow illustrated herewith depicts a worthy example of adaptability of brick for bungalow construction.

There are many practical advantages in the arrangement of rooms suggested for this exterior. The living room and dining room extending across the front of the house will make a most desirable and beautiful interior.

The second desirable feature is the owner's room with its adjoining sleeping porch opening from the living room through a pair of glass doors; then the bath a few steps up making it equally convenient for both the first and second floors. The central hall allows for all rooms being readily accessible, a feature fully appreciated by the housewife.

A pantry generously provided with dresser and cupboard accommodations connects the kitchen with the dining room, and to the rear a large porch enclosed with glass or screens is intended to be used as a laundry. The flue for the kitchen range being pitched against the dividing wall will allow a laundry stove to be readily connected.

The second floor shows how four good sized sleeping rooms could be provided if the pitch of the roof was slightly increased. Ample closets are shown opening from each room and generous storage space under the slope of the roof.

The estimated cost, exclusive of heating, plumbing, electric work and decorations, is $2,500.00.

Though thoroughly modern in design, the long white painted shakes and the entrance treatment gives to the second bungalow a peculiarly quaint elevation. Flowering vines tumbling over the side

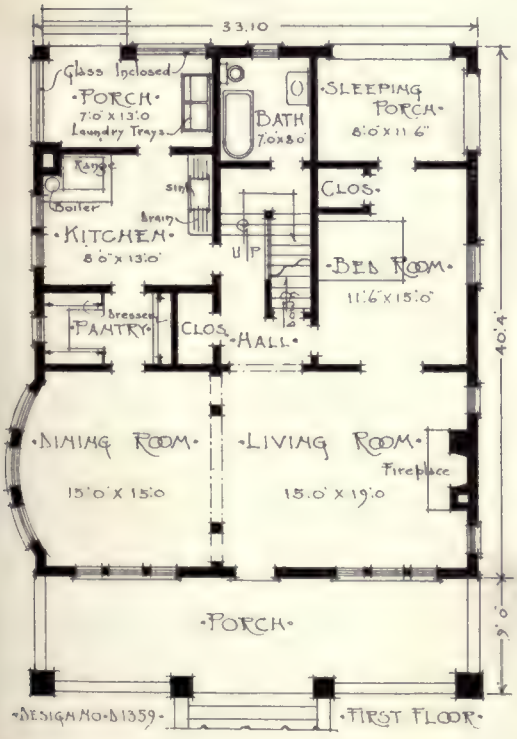


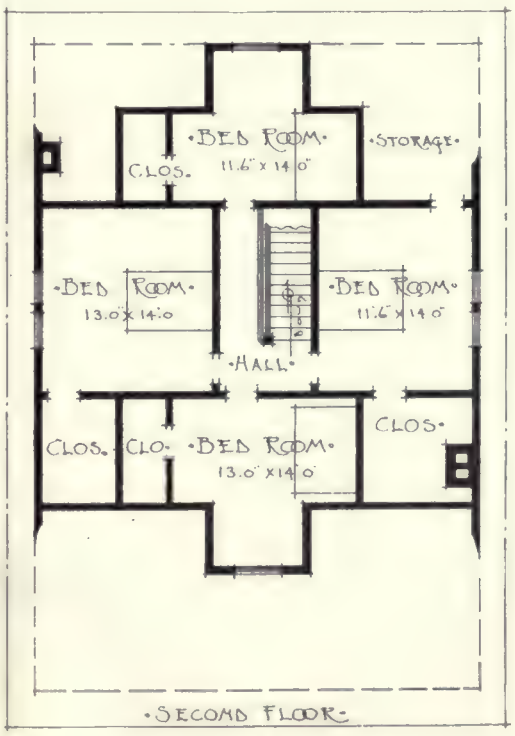
A worthy example of the adaptability of brick for bungalow construction.

pergola and supported in some unconventional manner at the side of the entrance door would add considerable interest, and give to it an even more permanent and satisfactory air.

Suggested herewith is a floor plan for this interesting elevation. No basement has been intended. However, if one were desired, it could be readily arranged for. Every inch of space has been accounted for in planning, and the result is both attractive and convenient.

Exposed on three sides the living room will be a veritable garden of sunshine.

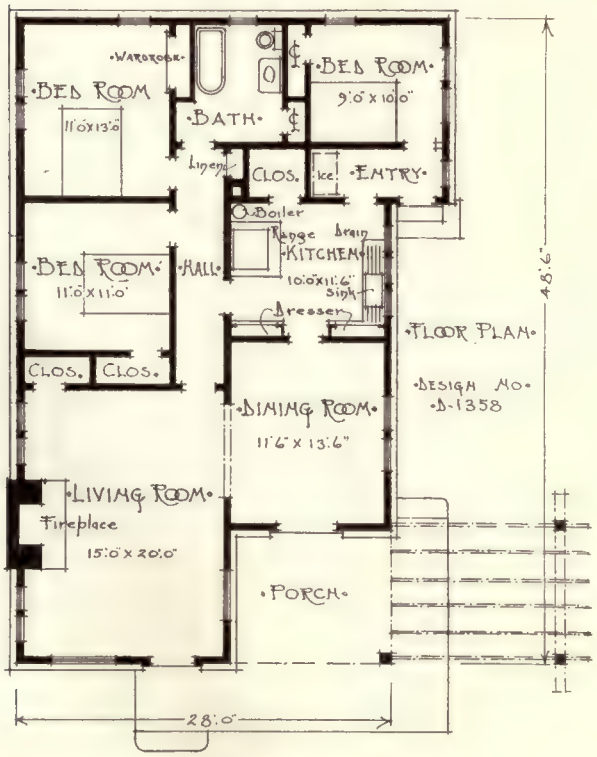






The long white painted shakes and the entrance treatment gives this bungalow a peculiarly quaint elevation.

The fireplace of bluish tile would give a cool and restful touch of color and form the key note to the decorative scheme of the house. Through a wide archway, the dining room immediately adjoins, fully as attractive, and opens on to the porch through a pair of glass doors. There is direct service from the pantry kitchen, where closet room and modern conveniences are provided. An entry gives space for the refrigerator and opens to the kitchen and maid's room. This is a feature thoroughly appreciated by the domestic of today, and reflects in turn upon the general happiness of the mistress of the house.



The master's bedrooms open upon a central hall to the living room. Generous closets are in each room and linen shelves with drop doors are arranged in the hall.

Louvres under the gables allow for a continuous circulation of air under the roof, which carries off the heated air arising from the various rooms through adjustable ceiling registers.

Two thousand five hundred dollars is the estimated cost of this charming home, exclusive of heating, plumbing, electric work and decorations.

An Attractive English Design

THIS design is one that should appeal to many. It was built in one of the restricted districts of Minneapolis and has been admired by many, both as to the interior and exterior treatment. The floor plan while not unusual combines many unique and attractive features seldom found in the moderate priced home. The entrance, in the center, is into a good sized vestibule, closet space being taken off of one end. The living room extends across the entire front with a brick fireplace at one end, with built-in bookcases at one side and a French door on the other leading out on to a sun porch equipped with screens and sash.

Directly opposite the fireplace is the stairway; on a large landing up one step, additional bookcases have been provided under the projected bay. A large window seat on this landing occupies the space between the vestibule and the wall. With a hinged lid, good storage space is provided in this seat for rubbers, umbrellas, etc. A wide cased opening separates the living room from dining room.

To the rear of the dining room is a breakfast porch reached from the front part of the house through a French door. A door opens from this porch into the large pantry, or serving quarters. The pantry is fitted with cupboards, work table, and refrigerator which can be iced from the rear porch. A stair from kitchen leads up to landing, using the main stairs on up. There is a small cupboard in passageway to basement stairs, where kitchen utensils are kept.

The first floor is finished in fir with birch floors. Kitchen in yellow pine, natural.



W. W. Purdy, Architect.

The shrubbery and large growing trees have added much to this attractive residence.



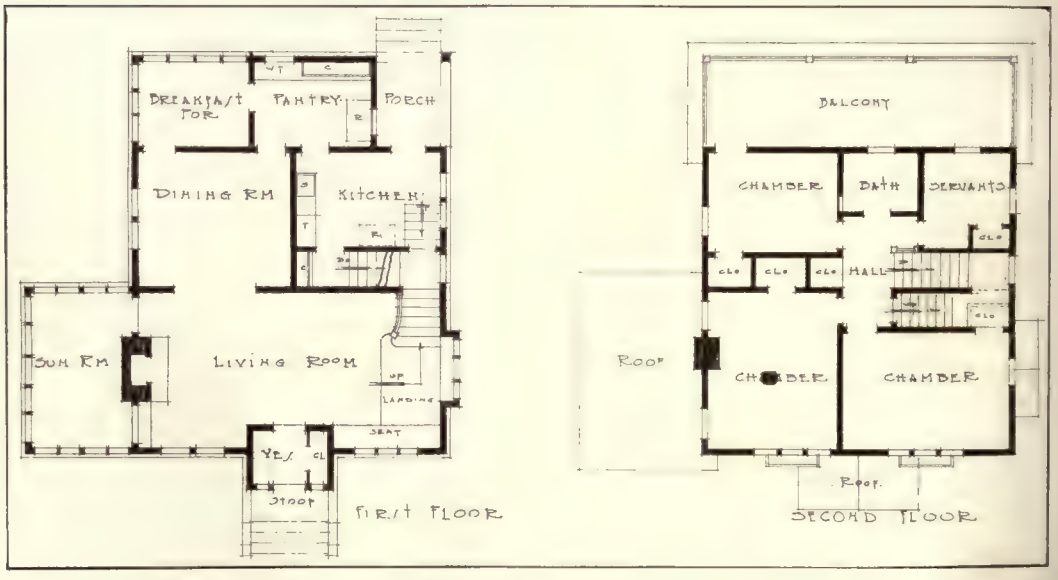
The rear view, showing glazed-in breakfast room.

On the second floor are three good chambers, a maid's room and bath. Note the small amount of space taken up by the hall, which has a linen closet. The finish for this floor is in white enamel, with birch doors stained mahogany and birch floors. Tile for the bath. There is a stairway over the main stairs to attic, where good storage space is provided.

In the basement is ample space for fruit and vegetable rooms, fuel, furnace and good light laundry.

The plans show a concrete foundation with brick up to the first story sills. Cement plaster over metal lath above and half timber work in the gables.

The small illustration shows a view taken from the rear showing the glazed-in breakfast room with the large balcony above, giving a place for airing bedding. Since the house was built the owner has provided a sleeping porch, not shown in the photograph, by putting in pergola beams with a flat roof and screening in the same.



A Brick and Cement Stucco House

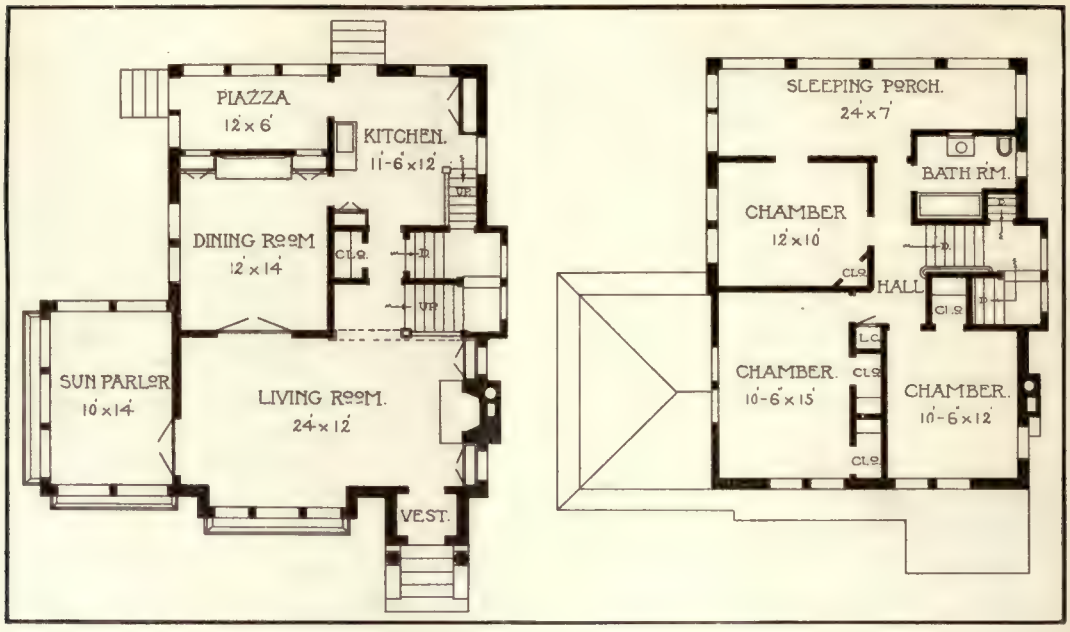
THE size of this house is 25 feet 8 inches wide by 34 feet 8 inches deep, with a sun parlor at the left 10 feet wide by 14 feet deep. The construction is with brick or tile walls in the first story and frame above, covered with cement stucco finished with a "pebble dash." The roof is low pitched hip roof covered with Spanish tile, the sun parlor also has a low pitch Spanish tile roof. The lower portion of this roof covering over the projected bay in the living room and connected with the porch roof, is roofed with tile and gives a very artistic appearance to the front of the house.



Chas. S. Sedgwick, Architect.

The red Spanish tile roof adds an interesting bit of color to the otherwise plain surface.

The vestibule entrance at the right has Colonial treatment with semi-circle roof and is covered with copper and has Ionic columns each side of entrance. This vestibule opens into the main living room across the full front of house 24 feet in length by 12 feet in width, and at the right end is an open fireplace with book shelves at either side and small ornamental windows above. At the rear of this roof on the right is the main staircase with double platforms projected on the outside and well lighted with windows. These stairs are on the combination order with basement stairs and grade entrance underneath and short section of stairs from the kitchen to the main platform. At the left of the living room and connected by wide glazed French doors is the dining room, 12 by 14 feet, with sideboard at the rear and china closets on each side, connecting directly with the kitchen at the right, which is 11 feet 6 inches by 12 feet; in the rear of the dining room is a glazed piazza. This house, though not large, is very compact, roomy and convenient. The first floor is finished in mission stain and natural oak floors.



The basement is full under the main part. It is estimated to build this house for $5,000 to $5,500, exclusive of heating and plumbing.

The second story has three good sized chambers, ample closets and large bath room in the rear with a wide sleeping porch across the rear enclosed with glazed windows. The construction of this house and finish throughout is strictly first class. It is designed to use dark Oriental brick in the first story with deep sunk joints and tint the stucco above, staining all the trimmings, cornices, etc., a dark brown with the sash painted white. This combination; together with the tile roof that may be either green or red, will give a very striking and artistic appearance.

A Spacious Colonial Residence

THERE is probably no other type of architecture so popular and so last-in as the Colonial. In this design we have an unusually plain treatment of the Colonial detail, the plan being quite elaborate and should be built in the suburbs where an acre or so of ground is available.

This plan calls for the exterior walls of brick or tile, which on a house as large as this with tile or slate roof is much to be preferred.

The sketch shows the house built on the slope of a hill, which with the broad terrace across the entire front and the wide sweeping steps and large Colonial columns supporting a Colonial pediment, give a stately air to the ensemble.

The floor plan is of the central hall type, for this is the most preferred for the Colonial treatment where much depends on the stairway detail. The width of stairs and of the treads must not be cramped.

To the right of the hall is the large living room across the entire end, with beamed ceiling and large colonial fireplace, a double pair of French doors, one



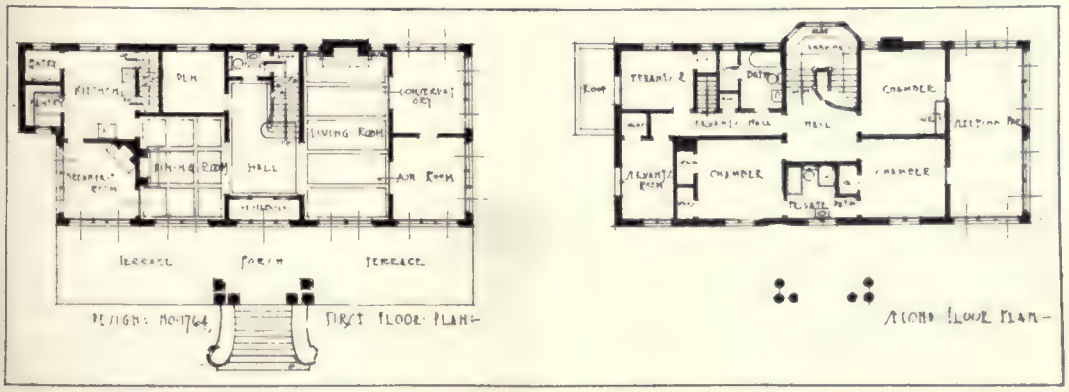
The wide sweeping steps and large colonial columns supporting the colonial pediment give a stately air to the ensemble.

pair opening into the sun room and the other into an adjoining room used as a conservatory, which if desired, could be used as one large sun porch.

The dining room is to the left of hall and has a tile fireplace and beamed ceilings. French doors lead from dining room on to a small breakfast porch, which in turn has direct access to kitchen. Here is another corner fireplace. There is a good sized kitchen, rear entry and pantry. A back stair leads to the servant's hall on the second floor, while under this is provided a back stair to the basement. A small den opens off the large center hall as well as a toilet. This completes the first floor arrangement.

On the second floor are three good chambers, two of which connect with a private bath and the two on the side open on to a large sleeping porch extending the whole width of the house.

In this house quarter sawed oak has been used for the floor on the first floor; kitchen in pine for linoleum; breakfast room, sun room and conservatory in tile. Finish in these rooms fir stained white. The finish for the main rooms of first floor is white enamel.



A Cement Cottage

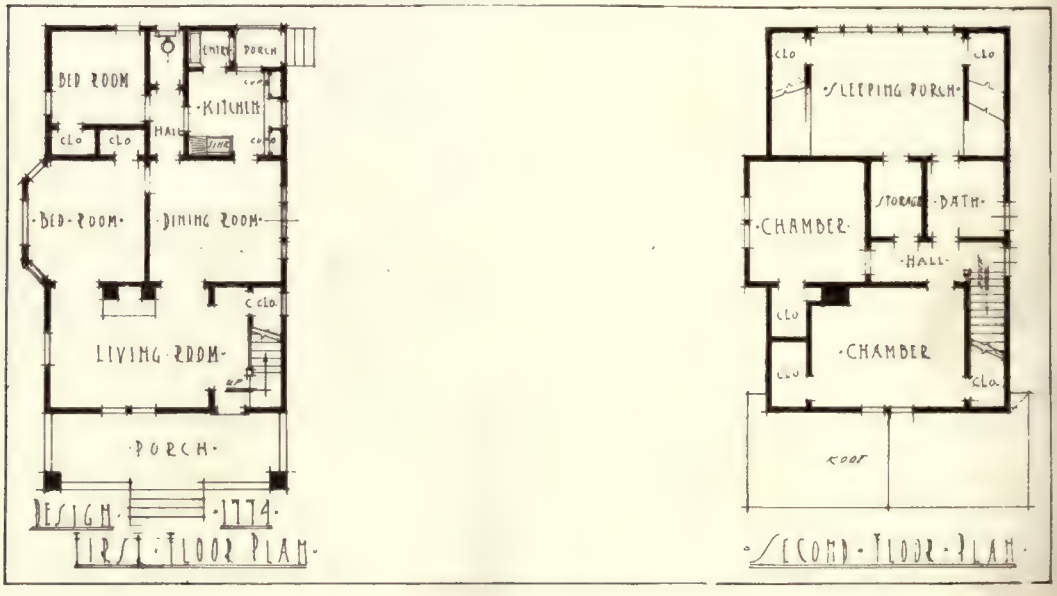


This modest cottage would be ideal for a small family.

AN attractive little cement cottage with half timbers in the gables.

With its frame walls covered with metal lath over which has been applied cement plaster "rough cast" and the half timber work in the front and rear gables and dormer, we have a very pleasing little cottage home.

With two good chambers on the first floor and two more finished off on the second floor beside the large sleeping porch, this little cottage will accommo-



date quite a large family. Ample closet space is provided for under the roof. The space marked for storage could be used as a hall for passageway to sleeping porch if we did not care to use the door to same off bath.

The space at the rear of first story hall is to be used for basement stairs.

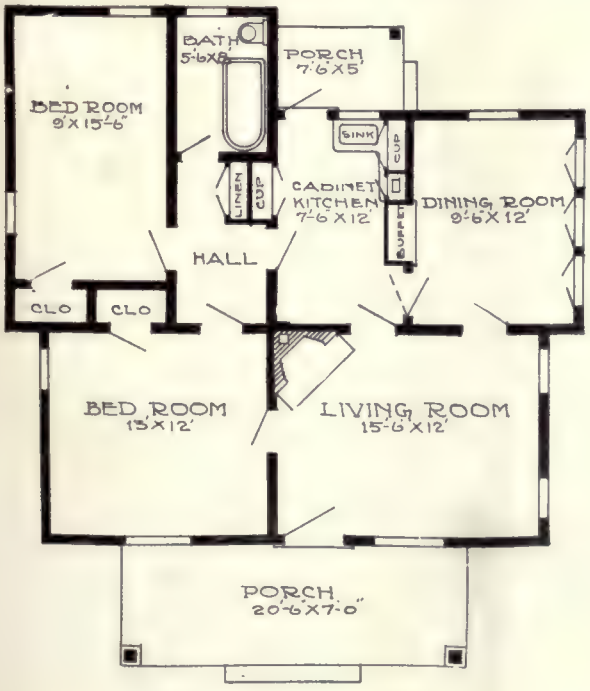
Bungalow Planned by a Woman



Bungalowcraft Co., Architects

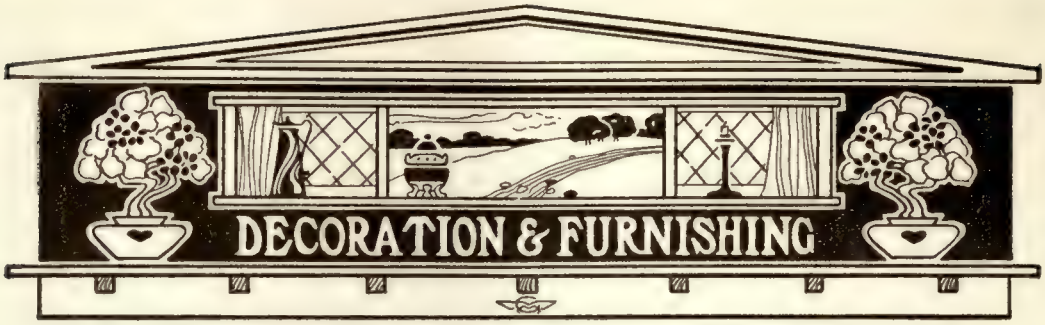
In planning this bungalow, convenience was the keynote.

THE exterior of this bungalow should be all of unsurfaced wood, stained, and the roof should be stained a moss green or frosted. The living room is well lighted and has an open fireplace and brick mantel. One chimney with two flues answers for the fireplace in the living room and for the kitchen range. The dining room has a pretty but inexpensive buffet, with pass door through to the kitchen. One end of this room is nearly all windows, forming a very attractive effect. The kitchen is not too large and has plenty of closets and cupboards, just where they will save steps and an excellent corner is reserved for the range.



As will be noticed, the kitchen is the very heart of this house and only a few steps take one to any room, bathroom, closet or out on the screened porch or by two ways to the front door. The rooms are not large, neither are they too small—but just about right for the housing of a family of four or five with the least possible work and worry.

This house is arranged from an economical standpoint and should be built, according to the architect, at a cost of about $1,200, with full plaster finish, stained woodwork, good plumbing and electrical wiring and fixtures.



Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Value of Mirrors

WE associate the use of large mirrors with the Mid-Victorian period, when domestic taste was at a very low ebb, and so we are apt to leave them out of our calculations when thinking out our decorative schemes. As a matter of fact, well placed mirrors are a valuable asset in many rooms, especially those in dark colors and not too well lighted, and also afford a means of correcting defects of proportion.

To one sort of room a mirror is almost essential, and that is the formal parlor furnished in the French style. A large mirror over the mantel is the natural backing for the clock and vases which are the proper and only really necessary ornaments for such a room. In default of this large mirror, set flatly against the wall, an oval mirror with its long diameter parallel with the mantel shelf may be used, but it is not nearly so effective.

These large mirrors need not be French plate. So long as the glass is flawless and kept well polished, the effect of a cheaper mirror is just as good. It is often possible to find large mirrors at a very reasonable price in second-hand shops, and they are almost sure to have gilded frames which will fit in nicely with a delicate color scheme. If the gilding is badly tarnished it is quite possible to renew it oneself at a moderate expense.

In buying a new mirror for this purpose, it is far better to buy the glass and have it framed to order in a moulding matching the woodwork of the room, making it a permanent addition to the house. The entire surface of the chimney breast up to the picture moulding should be covered. If the picture moulding is at the ceiling line, rather than a foot and a half below it, the mirror should stop at about that distance from the ceiling and be outlined by a curving moulding. If you choose a French plate, close your ears to the seductions of the dealer and refuse to have it beveled. The beveled mirror has one excuse for being—to advertise the thickness of the glass—and your house is not an advertisement of any man's wares. The distorted reflection given by the edges of a beveled mirror is very unpleasant, and the money saved will do more good elsewhere.

The Narrow Hall.

It is in the narrow halls of city houses, halls disproportionately long and generally badly lighted, that the mirror has its widest scope. Instead of the conventional hat-rack at the foot of the stairs, have a long, narrow console with a mirror covering the entire space above it, and your hall is metamorphosed—seems as wide again. The necessary but seldom ornamental hat-rack can be retired to the space under the stairs. If you would still further improve the situation, replace the double doors into the vestibule by a single one with a sidelight and set a flowering plant on the sill of the window. Then in the long, dark space at the side of the stairway hang another mirror, its length parallel with the stairs. With one good picture on the wall by the door, opposite the mirror, you have an effective entrance with comparatively lit-

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tle trouble, and one which gives an illusion of much greater than the actual space.

A Mirrored Doorway.

A clever thing was done in the narrow hall of a New York house, in fastening to a section of wall a door frame similar in design to the others, latticing it off in two sections and in small panes like the French doors, so much used between communicating rooms. Instead of clear glass, these doors were filled in with looking glass, so that one seemed to be looking into an adjoining room. It would be possible to adapt this arrangement so that the doors could open on a shallow coat closet, or, in a living room, on narrow shelves for work or papers.

Places for Small Mirrors.

One finds in the shops extremely pretty and decorative small mirrors, some in wood, some in Florentine gold frames. Those with gold frames are apt to be on a standard, but this is easily removed and the mirror hung flatly against a wall. A pretty use for a round Florentine mirror is as a center for a group of small framed pictures in color. One is apt to accumulate these and they are generally too small to group well with other pictures. A group of women's heads, in color, in oval frames, arranged about a central mirror is generally effective, or the pictures may be French prints in color.

A good way to place the photographs of one's intimates is to frame them in the same general style and group them above one's writing desk, and here, too, the central mirror is useful.

Long, narrow mirrors, with an upper section containing a picture, generally in color, are sometimes called Marie Antoinette mirrors, and are sold everywhere, often at very low prices. They are invaluable for filling the very narrow spaces between or at the sides of windows in city houses, especially those of the swell front type, where the wall space between the two wide windows is hardly more than a foot in width. One of these mirrors with a bracket below it supporting a plaster cast is as good for the place as anything, far better than a picture. A picture requires light, the mirror gives it. Take the corner made by two windows at an angle with each other. If left unoccupied it looks bare, if pictures are hung on the two walls they are not seen; but fill it in with some sort of a corner cupboard, open shelves below, a closet above with a mirror in the door, and straightway the corner becomes an interesting thing.

Making Over Old Mirrors.

As I have said before, one can often buy a large mirror very cheaply second-hand. In cities where old houses are being torn down, their fittings are often sold for a trifle, and they must often include mirrors. A large mirror can be cut down into several small ones, which can be framed either in ordinary picture mouldings, or else to match the woodwork of the rooms in which they are to be used.

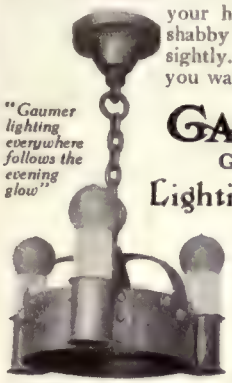
A dressing table fitted with a triplicate mirror is usually quite expensive, but it is a very simple matter to have the three sections of the mirror cut, one high and rather narrow, the others nearly square, have them framed in a narrow moulding of the same wood as the furniture and properly hinged. Then they can be set either on a plain table of the proper size, or on a pine table draped with muslin or cretonne. The backs of the frames must, of course, be neatly covered with cretonne or other figured fabric before the three mirrors are hinged together. A large mirror can be cut into a set of these mirrors and still leave plate for at least one long, narrow mirror as well as for several small ones.

When a long and not too wide strip of mirror can be found it should be attached with a narrow moulding to a bedroom door. Such a mirror is far more satisfactory than a cheval glass at a fraction of its cost, and takes up absolutely no room.

A mirror should be a part of the interior finish of a bathroom. It should be attached flatly to the wall above the hand basin and be surrounded with a flat moulding painted like the woodwork. Here, too, is an opportunity for using up a piece of plate bought second-hand.

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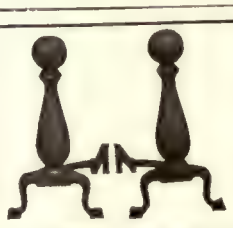
Spring is the season when most of us give our attention to the renovation of our houses, and are actively concerned with paint and papers. Now is the time to acquire a rigid backbone with which to withstand the wiles of the decorator, who is sure to suggest elaborate and profitable —to him—schemes of wall decoration. It is a great help to one's pocketbook to realize that while wall paper is cheap, laying is not, and that any deviation from absolute simplicity is sure to cost very considerably. To illustrate: I recall a large and lofty room covered with a very inexpensive paper, a chintz stripe on a white ground. This was carried to within a yard of the ceiling, where it was met by a drop of pink buckram paper. At the top and bottom of this drop were set wooden mouldings, the lower one very heavy and expensive. Following the lines of this moulding and carried up the side edges of every single wall space, and it was a large room with many angles, was a border of the chintz stripe, cut from the roll. The expense of cutting these stripes, of laying the drop, the mouldings and the stripes was many times in excess of the cost of the plain paper and its laying, had it been carried over the entire surface of the room. Nor did the decorator in advising the treatment take into consideration the fact that the room was a northwest one, absolutely sunless, and the last one to have been papered in such fashion.

The wall paper factories turn out many very beautiful designs simulating panelings surrounded by scroll work and surmounted by rosettes, which are charming for formal rooms. They are expensive to begin with and they require skill of a high order in the laying. Japanese grass-cloth makes a very beautiful wall, but the average workman will spoil it in the laying. There is a washable wall covering, which, in some of its patterns, is charming, and has the advantage of being absolutely sanitary, but if it is to look well, the wall beneath it must be free from the slightest irregularity. All these things must be taken into consideration before you decide upon your decorative scheme.

Ordinary wall paper comes in rolls, eight yards long by eighteen inches wide, but a single roll is not usually sold. Imported papers are often wider, but the length of the roll is less. In calculating the amount required for a room you must allow for a certain amount of waste in matching the pattern. If the design is a large one, this may amount to a foot on each breadth. With a very small pattern it may be no more than an inch or two, while with a striped paper, or a plain one, it will be nothing at all.

In the average room, with a picture moulding a foot and a half or two feet below the ceiling, you will get two lengths out of a roll of paper, and you will probably have enough left at the end of the rolls for the spaces under windows and over doors. To calculate the amount of paper required, measure the circumference of the room, leaving out the spaces occupied by doors and windows, and for each yard of this circumference allow a single roll of paper. If the room is a high one and the paper is to be carried unbroken to the ceiling line, you will probably need a roll and a quarter for each yard of circumference.

The most economical way of decorating a room is what is sometimes called the upper third style. The tint of the ceiling is carried down on the side wall to a point about seven and a half feet from the floor. The surface below this is papered and the two sections separated by rather a heavy moulding. This requires a comparatively small amount of paper and the cost of the wall coating is a trifle. It is an admirable treatment for any room with many openings, and is an extremely good one for bedrooms.



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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Color Scheme for Six-Room Bungalow.

A. MacN.—I would greatly appreciate suggestions in wall decorating, fireplace and woodwork. Am enclosing floor plans, with exposures of our six-room bungalow, the two bedrooms, bath and kitchen finished in white enamel, breakfast room in gray enamel and would like to know your opinion of finishing the living room, dining room and hall, etc.

Ans.—On examining your floor sketch we find a large amount of floor space but badly arranged. We especially regret the veranda across the north end of the house, as it cuts off what little light and sun the northeast facing of your main living room would give. Inasmuch as you have a veranda in the front, you can very well dispense with the one on the north. Moreover we see no way of reaching the dining room from kitchen, except by passing through breakfast room. If the veranda on the north must remain, then every effort must be made to bring an effect of sunshine into the living and dining room. We would strongly advise at least changing the location of the china closet in dining room centering it on the south wall and cutting an east window in the space thus obtained.

In regard to finish of woodwork in these rooms, we think your plan of using white enamel with mahogany doors very good for living room and hall, only instead of white we would make it deep ivory. We would advise using the mahogany stain also on the bookcases, the window seat, the staircase and the hall seat and for all the vestibule trim.

With the quartered oak dining room furniture we advise a soft fumed brown stain for the woodwork, old gold grass cloth or the paper imitation in the wainscot panels and a decorative paper above this in yellows, shades of brown and apricot on a deep cream ground, with cream between the ceiling beams. A rug in browns, yellow and cream and curtains of thin yellow silk.

The birch floors in both rooms and hall should be stained a rich walnut brown.

The living room wall should be a soft light ecru and ceiling ivory and with this wall the mulberry rug and hangings will be very good indeed; nothing better. Let the portieres be of mulberry velvet and the davenport and seat upholstered with the same. Then find a cotton tapestry or printed linen introducing dull red, rich blue and yellow on a cream ground, and upholster the chairs with this; also one large natural wicker fireside chair. Cream lace or net curtains under the velvet side drapes. The hall walls best be of a self toned tapestry design in rich yellowish ivory and carry the mulberry furnishings through in hall.

Combining White Enamel and Mahogany In a Modest Home.

C. M. S.—"I am a constant reader of *Keith's Magazine*. Enclosed you will find first floor plan of a small cottage I am building. It's what we call here in the East a cottage bungalow, with three large bedrooms and bath on the second floor. The second story will be finished in white enamel, with mahogany stained doors. On account of the colonnade openings on the first floor, the hall, dining room and living room will have to be finished all alike. Had thought seriously of painting them all white enamel, with mahogany stain on stairway and china closet; den, bog oak stain. Our living room furniture is mostly mahogany; dining room furniture golden oak. I realize that hard pine is not a high grade finish, and the house is not going to cost over $4,000, but I would like to have everything in good taste.



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"Will you kindly give me the benefit of your excellent judgment and suggest the best manner of finishing the woodwork for this place; also recommend the correct shade of paper for the different rooms? The kitchen will be finished natural wood with painted walls. I prefer dark green window shades."

Ans.—Inasmuch as you have birch doors, they can very well be stained a dark brownish mahogany. White enamel seems rather a pretentious finish for the living room of such a cottage. We have seen, however, a very pleasing effect for such an interior where the doors and the small cap molding of baseboard, tops of door casings, mantel shelf, etc., were stained such a dark brown mahogany as we suggest and the remaining trim painted a flat, deep ivory. Such a treatment would harmonize both with your living and dining room furniture.

The bog oak stain in den is a very good idea and with it we would combine dull yellow walls in a grass-cloth weave of some kind.

It is unfortunate that your hall and kitchen have the choice, south facings. You must use warm ecru tones on living room wall. The dining room might combine old blue walls with old gold window draperies. There is a new paper having a wide tapestry stripe in soft reds, blues and greens on a medium grey ground that would look well in the hall.

Living and Dining Rooms.

H. B. G.—I am writing to make inquiry relative to interior decorative schemes for my new bungalow. The structure faces the south.

My particular query concerns the living and dining rooms, both of which I intend to finish in birch stained a dark brown and finished in either a flat finish or a rubbed varnish, and to floor with No. 1 clear quarter-sawed oak flooring. Both rooms are to be beamed and the dining room is to have an outline birch wainscoting.

I am somewhat in doubt as to the most suitable colors to use in the decorations, and am therefore asking your suggestions. Would it give a pleasing effect to tint the side walls (which are to be sand finish) a medium brown with a buff ceiling and then use brown curtains and hangings? Or what would your criticism be of a putty-gray sidewall, very light buff ceiling and blue curtains, rugs and hangings? In either case I believe that both rooms should be decorated after the same scheme, inasmuch as they are separated only by colonnades. Am I not right? Any suggestions you may have to offer concerning these or better color schemes will be gratefully received.

My foundation and chimneys are to be of a dark, reddish brown matt surface hard brick. I had thought of painting the body of the house yellow with brown roof and dormers. What would be your criticism of this scheme, and what would be your further suggestions?

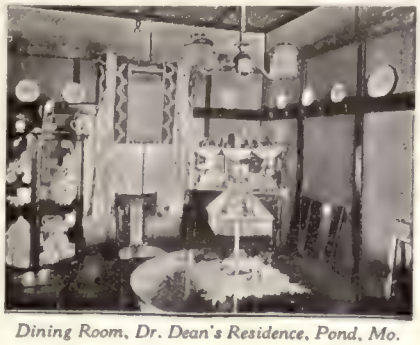
As to furniture, do you believe that I would be satisfied with tapestry upholstered in the living room? Or would you suggest the use of a leather upholstered furniture?

Ans.—We think in view of the dark brown trim and of the southwest and east exposures of these rooms that brown walls and buff ceiling would not be so happy as a scheme of putty-grey walls with plain blue rug and hangings in living room, a blue and green combination in dining room. We would choose a Saxony or a Roslyn rug in a plain deep, rich blue for the parlor, with side hangings for the windows in grey Craftsman cloth. Then upholster the furniture in the deep rich blue.

Personally, we much prefer tapestry to leather. It is an excellent cover for a davenport or chair which has hard wear, but we would like a grey wicker chair or two, with seats of plain blue velour or velvet in this room.

Below the wainscot line in dining room, tint the wall the grey of the living room, but above the wainscot, use a blue and green and grey foliage paper. Have a Wilton or a Brussels rug in mixed blues and greens and ivory voile curtains at the windows. Ivory tinted ceiling panels.

In regard to color of exterior, we should prefer a lighter cigar brown for the body of the house and deep cream for the trim.



Dining Room, Dr. Dean's Residence, Pond, Mo.

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For a Green Living Room.

R. L. McA.—Your magazine has been a great help to me in the building of my house so far, and I would also like your advice on the decorating of the hall, dining room and living room, principally the living room.

How would green walls suit this room? It is well lighted and the large window faces the south. The trim will be of fir, and I had planned on dark oak stain. I am making the furniture myself. What colors of rugs and curtains? What colors would the hall and dining room need to be, or would it make any difference?

What is the proper height to put the plate rail?

Ans.—In considering the treatment of the living room, the furniture of your own make must be the keynote of the decoration. The green stain is unusual for parlor furniture and we do not think green walls would be advisable as a background. We suggest instead a paper having an indefinite design in tones of sand grey, the design brought out in the darker grey. A rough, clothy surface in a tapestry design. The ceiling panels tinted a soft, plain light grey.

There is also a jute upholstery material in this kind of a wood-grey that would be excellent for seat cushions for the furniture. Then have a green rug and hangings of green. This will be green in plenty. The draperies you mention will not take the place of the ordinary shade to our mind, though they are sometimes thus substituted.

It would certainly make a great deal of difference in the general effect of your house what colors you use in hall and dining room. The dining room facing south and west would be very nice with soft, dull blue between the strips of wall board on the walls and an ivory ceiling. A dark, rich blue rug on the floor and blue Sunfast curtains. The best height for plate rail is about six feet from floor. We would not use a picture moulding in the dining room with a ceiling beam. In the hall, one of the imitation leather papers called leatherette, in light golden browns with touch of red, would be excellent to use in the panels of the wainscot, with a plain tan paper above.

Combination of Grey Tones.

J. M.—Will you kindly give me information regarding the selection of wall decoration, rugs and hangings for the living room, dining room and bedroom of my new bungalow?

The living room faces northwest. The house is white stucco with light grey trim. Grey shades. Interior finish, dark mahogany. Floors, light oak. I intend to buy mahogany furniture for living and dining rooms. For the bedroom, which would be preferable, mahogany or ivory enamel?

In building the fireplace, what color brick would you advise me to use?

Ans. — In reply to your request, we should treat the walls of these three rooms which open into each other in tones of grey. We do not mean you should use the same thing in all the rooms, but let the grey tone run throughout.

In living room, for instance, a self-toned grey tapestry paper; in dining room we would wainscot the lower wall and use a putty-grey crepe paper in the panels; above a foliage paper in dull blues and greens and greys, with blue rug and blue tapestries. In bedroom, a pretty grey stripe with pink and blue-flowered border and flowered cretonne for hangings.

We advise mahogany doors with balance of woodwork ivory.

Sand-grey brick is suggested for living room fireplace.



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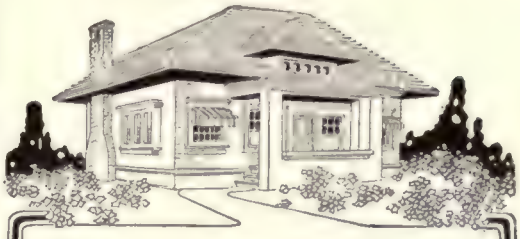


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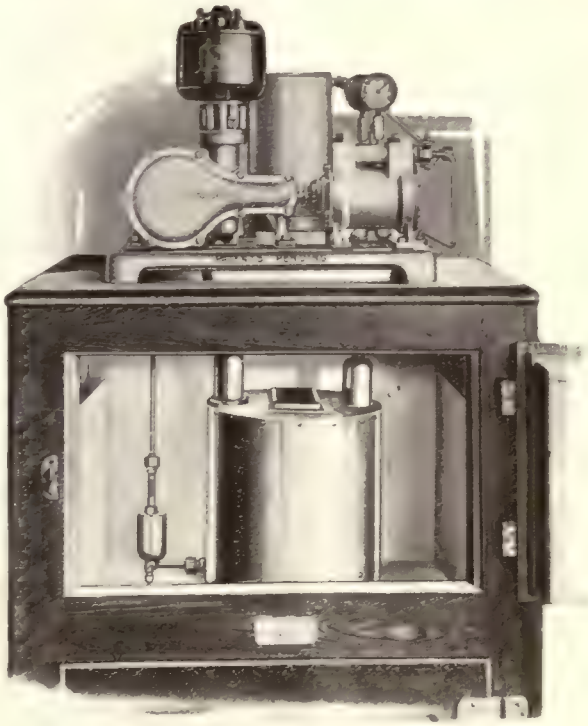


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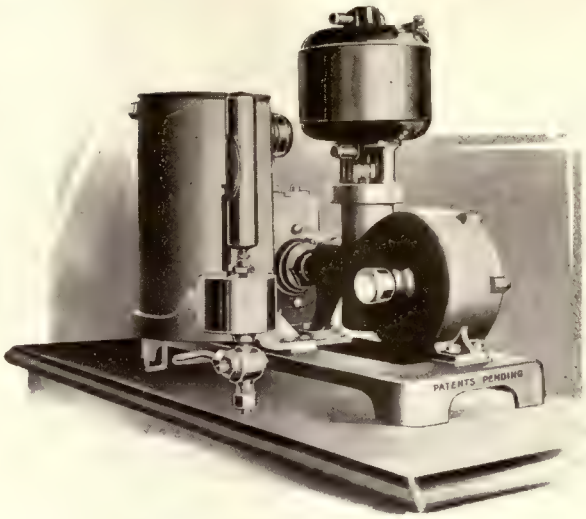
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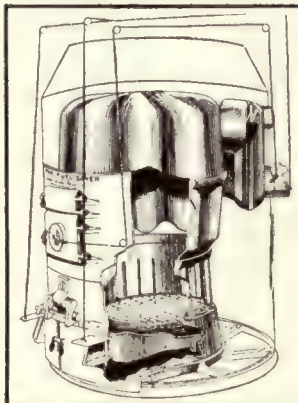


Perspective view showing side and rear.

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The machine illustrated here was designed for household use. It controls a field of tremendous commercial possibilities, in that no process or machine has been perfected before this one that could be placed in a kitchen and perform the duties for which ice has been used formerly and at the same time be fool-proof, economical and safe. It requires absolutely no personal attention, and performs the work for which it was designed and installed economically and reliably.

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4th. All parts being heavy and substantial, long and satisfactory service is assured.

Further information regarding the ***Fuel Saver*** will be gladly furnished upon request.

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WATERLOO, IOWA



Design No 524 by Jud Yoho. Estimated cost $2800.

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Bungalow Book. 1915 De Luxe Edition contains the cream of 1,000 practical and distinctive bungalows actually built for $400 to $4,000, suited to any climate, with photos of exterior and interior views, plans, size of rooms, cost, etc.

Also valuable suggestions on bungalow building written by an expert. **The largest exclusive Bungalow Book published. 112 pages.** Price..... **$1.00** Post Paid

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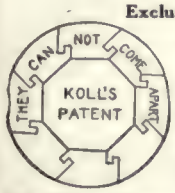
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showing a series of new designs for Pergolas and Pergola Columns.

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KOLL'S PATENT LOCK-JOINT STAVE COLUMN.

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$18 Heats 8 Room House All Winter



Cut-Out View UNDERFEED Furnace

½ to ⅔ Coal Bill Saving Guaranteed

THIS letter will make you sit up and take notice. It is one of thousands just like it. And you can have *your* coal bills cut, and *your* home uniformly heated in just the same clean, modern, economical UNDERFEED way. You simply cannot be blind to such saving and efficiency. Read the letter:

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Gentlemen:—"In regard to my experience with the Williamson UNDERFEED furnace would state that I have heated 8 rooms the entire season at a cost of $18. Have had uniform heat and plenty of it in all the rooms, with little attention, no gas and very few ashes. It has cost me less to run the furnace than to run my cook stove."

Yours very truly,
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The Williamson New-Feed UNDERFEED is a veritable triumph among modern heating systems. Replaces old-fashioned overfed grates, stoves and other heating "devices." And does it at a saving of time, and money. Remember, a saving of one-half to two-thirds on coal bills is actually guaranteed.

WILLIAMSON NEW-FEED UNDERFEED Furnaces and Boilers CUT COAL BILLS ½ to ⅔

The "Why" of it All

In the New-Feed UNDERFEED the new coal is fed from below. The clean, live fire and coal is are always on top, right against the most effective radiating surfaces. The fire does not have to fight its way up. Dust, smoke and gases are consumed and turned into real usable heat by the clean, hot coals through which they must pass.

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With the New-Feed UNDERFEED you can burn the cheaper grades of coal with the same, if not better results, than the most expensive grades. It burns any size of hard or soft coal, from slack and pea or buckwheat up—burns it all to a clean white ash—no clinkers—no partly burned coals.

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THE WILLIAMSON HEATER CO.

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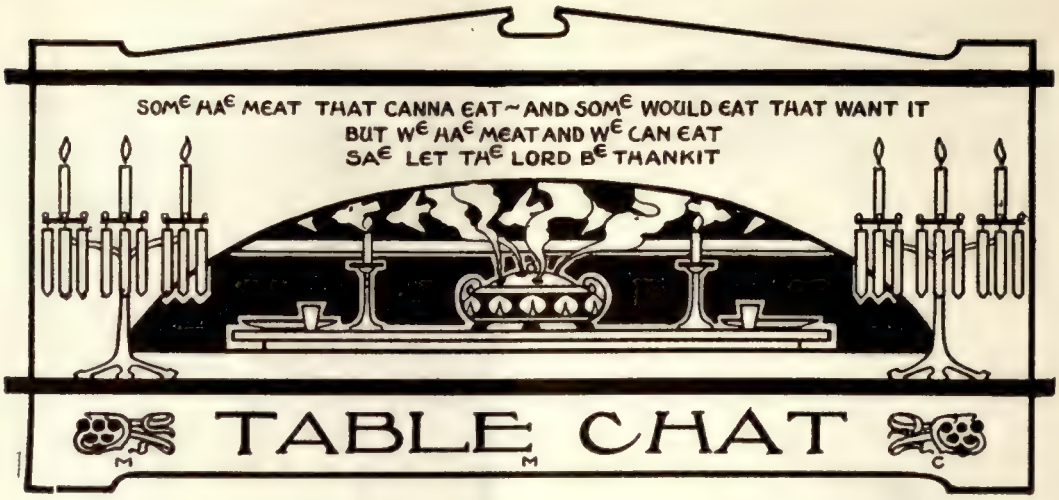
Tell me how to cut my coal bills from ½ to ⅔ with a Williamson New-Feed UNDERFEED.

Warm Air_____ Steam or Hot Water_____
(Mark an X after System interested in)

Name_____

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My Dealer's Name is_____



The Dining Room Between Meals

WHEN not in use for a meal, the dining room should be kept in such condition that it makes a harmonious item of the total impression made by the first floor. Whether it is desirable that the house should be so arranged that the dining room is visible from the other rooms is another matter. Many housewives will say that complications are avoided by having it shut off entirely, but this is seldom the case, and between meals the dining room must be more or less on dress parade. This would seem to preclude the common fashion of having the cloth stay on from one meal to another as the mass of white linen is very unhappy as a part of the general effect. Nor is a white linen centerpiece



A new way to use cold meat.



Move the family living room outdoors this summer, where all can breathe the pure, fresh air all day long. You can add a cheery room to your house—a shady, cool retreat for summer days—an outdoor sleeping room at night—by equipping your porch with

AEROLUX

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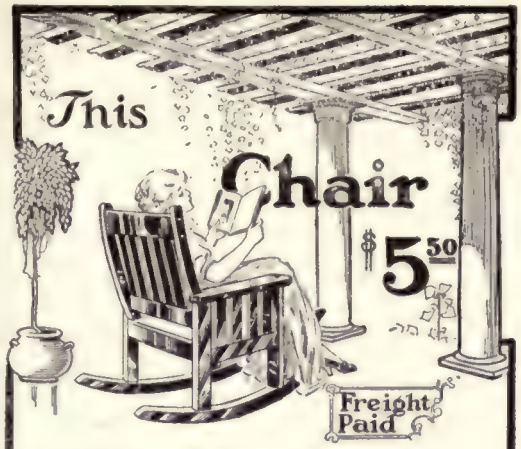
PORCH SHADES

They give just enough seclusion to make the porch homelike and add a decorative touch to the whole house. AEROLUX Splint Fabric Awnings do not absorb and hold the heat of the sun as canvas awnings do—they keep it all outside, making your rooms shady, airy and seven degrees cooler.



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HERE is a substantial weathered oak chair that you will be as proud of as you are of your garden—and the price in only $5.50, freight prepaid, direct to you. This chair is only one of the attractive line of "Bucyrus Bilt" outdoor furniture in weathered oak for porch, gardens and Summer houses. Weathered oak is the most practical finish for out-of-doors furniture. Every piece of the "Bucyrus Bilt" line is designed for beauty and strength and all the prices are in line with the bargain offered above, because we sell direct to you. Write *today* for prices on porch swings, tables, etc., to Dept. C.

WHITE SALES COMPANY
BUCYRUS, OHIO



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Genuine Gilbert & Bennett PEARL Wire Cloth is built to resist the ravages of the elements that combine to render common "galvanized" and "painted" screens worthless in most no time at all.

To be sure of "PEARL" wear you must get genuine PEARL Wire Cloth with two Copper Wires in the selvage and the Round Tag bearing the Gilbert & Bennett name on each roll.

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The Gilbert & Bennett Mfg. Co.

(*Established 1818*)

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The Best Hardware Dealer in Your City Sells "PEARL."

The Birds Will Come!

May and June

are good months to win the birds to your garden. Plenty of time yet for nesting.



Villa double Wren House of pleasing design; durable and attractive.



Colonial Bath Pedestal of simple classic design. A beautiful ornament for any garden. Birds flock to it.

This drinking and bathing pedestal will give you great pleasure all summer. All kinds of birds will come and enjoy it, especially in the hot dry months.

The artistic and practical designs of UNIQUE *bird houses* and *baths* give a much desired touch of interest and quaintness to the garden.

Send for The Garden Unique Catalog showing the full line of exclusive and beautiful styles.

THE GARDEN UNIQUE
3157 Ivison Ave., Berwyn, Ill.

on a bare table much better. If a lace centerpiece is used it is quite inoffensive, but all the smaller doilies should be taken off.

The best thing is a handsome piece of fabric of some sort. For a simple room this may be merely a square or oblong of colored linen, harmonizing with the color scheme of the room. If the covers of sideboard and service table are of colored embroidered linen, a piece for table should be provided as well. For handsome rooms where lace or white linen is used for covers, a length of Japanese brocade is effective, or some of the ordinary upholstery fabrics may be used, edged with an antique gold braid or some sort of a gimp.

For a rectangular table, the cover should be laid lengthwise, coming short of either end, or be laid across with ends hanging over the sides. Whatever center ornamentation is used, ferns or flowers should be set in the middle of the table.

Austrian Sauce for Lamb.

This may appeal to some one who is in search of novelty, and is said to be delicious with lamb. It is made by mixing a level teaspoonful of dry English mustard to a smooth paste with hot water, in a small saucepan, adding to it by degrees, stirring constantly until it is melted, a tumbler of currant jelly. Probably any other tart jelly could be substituted for the currant.



Raspberries and whipped cream.

Another sauce for spring lamb, this time of French origin, has four tablespoonfuls of mint for its base. Pour boiling water over the finely chopped mint to draw out the flavor, drain it off and add to the mint enough orange marmalade to make a sufficient quantity of thick gravy and serve like ordinary mint sauce. In preparing mint leaves, as well as for many other similar processes a sharp pair of scissors is far better than a chopping knife, and the work can be done in a quarter the time.

One of our illustrations suggests a use for fragments of cold meat. An earthen dish is filled with alternate layers of thinly sliced cold boiled potatoes and cold roast meat, well moistened with a brown sauce. Instead of a crust the dish is covered with a thick layer of boiled rice, which is dotted with bits of butter and sprinkled with cheese. It is browned in the oven, and just before serving the dish is decorated with triangles of toast and with sprigs of parsley. This is a good way to serve a curry of fish or chicken, a dish which is particularly good in the summer time, when meat is apt to taste rather insipid, yet must be eaten.

Raspberries and Whipped Cream.

Raspberries are usually tantalizingly scarce and high. They are economically served in a sherbet glass, piled with whipped cream and garnished with candied fruit, the service pieced out with a piece of silver or angel cake.



No Matter

what the cost of first appearance, your satisfaction and your money's worth are *finally* measured by the Quality of the Fixtures that go into your bath room.

Send for a Wolff Bath Book

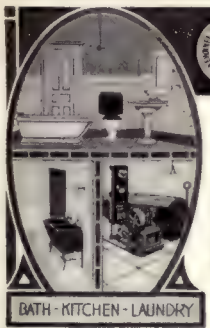
It will suggest arrangements and show appropriate fixtures for your home, fixtures of Wolff Quality and design, whether simple and expensive or elaborate.

60 years' experience in manufacturing every item of a complete plumbing equipment is back of every Wolff design.

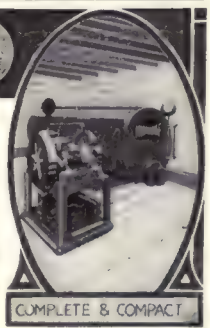
Regardless of the price asked, every fixture from the Wolff factory has received the same careful supervision in its making, and shows the same high quality of material and workmanship that has placed Wolff plumbing, complete, in thousands of residences from Coast to Coast.

L. WOLFF MANUFACTURING CO.

Pottery, Trenton, N. J. **601-627 West Lake Street, CHICAGO, ILL.**



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from bungalows and camps to suburban residences and country mansions, the deep, rich colors of

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are most beautiful and appropriate for the shingles, siding or timbers. The colors are clear and transparent and bring out the beauty of the grain of the wood instead of covering it as paint does. They cost only half as much as paint, can be put on twice as fast, the colors are lasting, and the Creosote "is the best wood preservative known."

You can get Cabot's Stains all over the country. Send for stained wood samples and name of nearest agent.

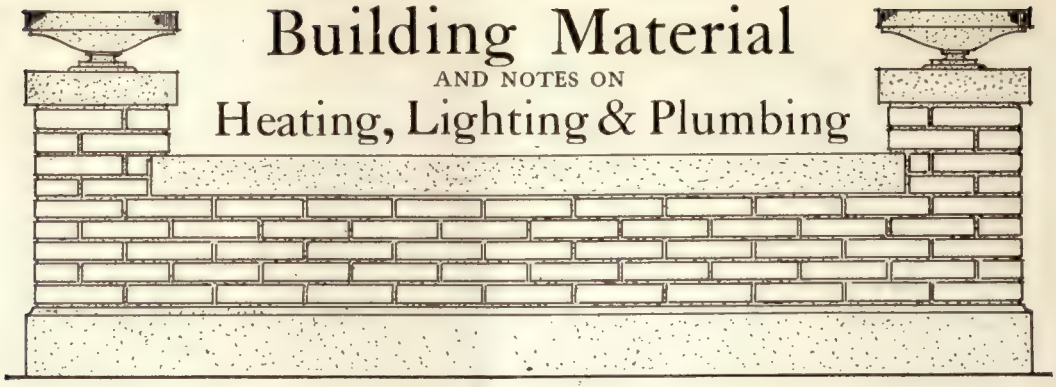
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Cabot's Stucco Stains—for Cement Houses.



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Stained with Cabot's Creosote Stains.

The Publisher of Keith's Magazine backs up its advertisers.



Metal Lath by Weight.

THE Associated Metal Lath Manufacturers during its four years of existence has made sincere effort to find, by research and field investigation, fundamentals that govern the use of metal lath.

The earnest desire of the metal lath manufacturers to get to the bottom of things is well evidenced in the fact that they have turned over to the National Bureau of Standards at Washington the investigation of the corrosion problem as affecting metal lath. Possible corrosion is recognized by architects and engineers as serious as regards all iron and steel material that goes into a building, whether it be gas or water pipe, structural members, roofing or metal lath, and the reports of the Bureau of Standards following their experiments and research should give much-needed information on this important subject.

Another thing which has been a source of annoyance to architects is a designation for metal lath that will be comprehensive and free from misconstruction. In the development of metal lath, whether of a form expanded from sheets or woven from wire, it has naturally been the practice to designate the material by the gauge of the metal.

The best building practice demanded the heaviest material — 24-gauge in expanded metal and 18-gauge in wire—but with the development of new forms of metal lath it was found possible in some forms to still keep within the letter of the specifications, but furnish less material; in other words, the tendency was to supply an increasingly larger area of holes surrounded by strands of metal that were of the full gauge, and the weight per square yard would be correspondingly reduced. This problem was approached by the Metal Lath Association in the same fair-minded way that has characterized all of the co-operative work carried on by that industry, with the result that at a recent meeting of the association, a resolution was passed to the effect that all metal lath in the future would be designated alone by weight, and in a metal lath handbook, now on the press, the recommendation made by the association is that in all specifications, metal lath be required to be painted if not galvanized, and to weigh not less than 3⅜ pounds per square yard.

It is quite unusual that the constituents of an industry can so far waive individual advantages and forget their differences as to unite on an elementary action of this sort.

Anything that tends toward uniformity or standardization of building materials is welcomed by architects, and the action of the metal lath industry should have its deserved appreciation.

Marks in Wood Record Heavy Wind Storms.

Little diagonal streaks or wrinkles across the grain of a piece of timber not only betray weakness, but sometimes indicate periods of stress through which the wood passed when it was growing. They may even be taken as a sort of check on the official record of wind storms, as in the case of some lumber tested at the forest service laboratory at Madison, Wis.

The marks are caused by what are called "compression failures," which occur when the fibers bend or buckle under



HERRINGBONE stands off big and petty losses. A house of stucco over Herringbone is fire resisting, economical, durable —requires no painting nor repairs.

Herringbone
Rigid Metal Lath

holds stucco and plaster—prevents cracks, falling or discoloration. A Herringbone house is warm in winter, cool in summer. Defies any climate or weather. Costs but little more than a wooden house.

For excessively damp climates or places where lath is particularly subject to rust or corrosion use Herringbone Armco Iron Lath—of the purest, most rust-resisting iron made.

"The House that Father Built"

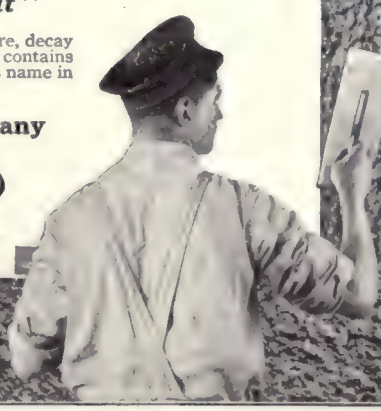
is a wonderful book if you want a home that resists fire, decay and time. Full of beautiful Herringbone houses. Also contains plans by leading architects. Mention your architect's name in writing and we will gladly cooperate with him.



The General Fireproofing Company
690 Logan Avenue
Youngstown, O.

Makers also of Self-Centering — the concrete reinforcement that makes forms unnecessary

Trade Mark Reg. U. S. Pat. Off.



a too heavy strain. In cutting up logs collected for experiments at the laboratory, it was noticed that these compression failures appeared on the north side of a number of trees which came from the same locality in Florida. By counting the annual rings of the wood and from knowledge of the time when it was cut in the forest, it was decided that the compression failures must have been caused by a severe wind from the south about the year 1898. Inquiries were made in Florida and it was found that a hurricane had, in fact, swept over the region at the time indicated.

The experiments have determined that the strength of a piece of wood may be seriously impaired by slight compression failures due to rough handling. Dropping a beam across a skid may cause a compression failure at the point at which the beam strikes the skid and it will be at this point that the beam gives way when it breaks under a strain too severe for the weakened fibers to withstand. Hitherto, unaccountable breakage in hickory wagon spokes and other presumably strong material are now attributed to compression failures caused by wind storms in the period of growth or by hard usage in lumbering and manufacturing processes.

Single Sugar Pine Yields Enough Lumber to Build Suburban House.

The government has received $99.40 in settlement for a single sugar pine tree which was cut in trespass in the Stanislaus national forest, in California, and which yielded more than enough actual lumber to build a good-sized suburban frame house. The tree scaled 18,933 board feet and was valued at $5.25 per thousand feet.

Not many trees contain enough lumber to build a two-foot board walk nearly two miles long, and this is believed to be the first case on record in which a single tree felled in a national forest was valued at almost $100 on the stump, although national forest timber is frequently sold at considerably higher rates.

Oak Flooring vs. Carpets.

The average homebuilder is very often misled in regard to prices on oak flooring. Three-eighths thickness oak flooring, which makes a very serviceable and beautiful floor, is cheaper than carpets. A yard of carpet is 27 inches wide by 3 feet in length, thus a carpet yard contains 6¾ square feet. Carpet sells at from $2 to $9 per yard. A fair average of good quality of carpet would be about $3 per yard. The best grade of ⅜-inch clear quartered oak flooring by 1½-inch face or 2-inch face can be laid and polished for $1.50 per carpet yard. This is one-half the price of carpet. Carpets over the entire floor is a product of the past and rightfully, too. Oak floors with rugs meet the demands of people that know how to have their home look up-to-date. Oak flooring beautifies any home and combines more taste and a greater degree of refinement than any carpet that was ever made.

The living, renting and selling values are vastly increased by oak flooring. Three-eighths inch thickness is used very extensively for reconstruction work where it may be laid over old soft pine floors or carpets without in any way interfering with the woodwork of the room.

The standard thicknesses of oak flooring are $^{13}/_{16}$-inch and ⅜-inch. The former comes in 1½-inch, 2-inch and 2¼-inch faces, and the latter in 1½-inch and 2-inch faces. The ⅜-inch thickness when laid has all the appearance of heavy flooring.

Oak flooring is hygienic and is very easily and economically cared for after being laid. No modern home nowadays is complete unless floored with oak flooring.

Concrete Roof for Dwelling Houses.

In reply to a builder who asked if there were any residences in California with concrete roofs and how such a roof for a dwelling should be constructed the editor of the San Francisco *Architect and Builder* offers the following comment:

"There are a number of reinforced concrete houses in California having concrete roofs, but we know of no frame dwelling with such a roof and would not recommend such construction, as the weight would be too great unless prior provision had been made in the superstructure to carry the extra load. In Los Angeles there are a number of houses with con-



There's Money in Banks—

money in designing them. Since the perfection of the oxy-acetylene blow pipe, which cuts steel like butter, even the smallest vault should be heavily cased in reinforced Atlas Cement Concrete. Inexpensive, sure protection. Ask

THE ATLAS PORTLAND CEMENT COMPANY
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"CONCRETE FOR PERMANENCE"

When your own painter suggests

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for the paint he is going to use on your house, it is a sign that he is negotiating for all your future work.

"Your Move" is a book that supplies sufficient information for you to act upon.

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A "Weatherbest" Roof Is Always Weatherproof



A white house with dark green "Weatherbest" Roof

"Weatherbest" Stained Shingles are made of only the best grades of Red and White Cedar Stock; are completely stained from tip to butt, under our special thorough process, with efficient wood-preserving, extremely durable, stain.



In Weatherbest Shingles you get the highest quality shingles, stained exactly the shade you desire, extreme durability in both color and wearing service, yet they cost you less than if you bought plain shingles and attempted to stain them yourself.

Ask us for this Free Packet of Sample Shingle Strips

showing colors on the natural wood. From it you can select shade you desire. If you tell us size and character of construction of your house, we will advise quantity shingles necessary and suggest color combinations.

TRANSFER STAINED SHINGLE CO.
166 Main Street NORTH TONAWANDA, N. Y.
Makers also of the superior quality
"Transfer Brand" Red Cedar Shingles
Demanded by knowing builders, sold by best lumber dealers everywhere.

Advertisers in Keith's Magazine are reliable.

crete tile roofs but here, too, it has been found necessary to materially strengthen the walls and rafters to carry the increased weight.

"Concrete roofs are all right for ice houses, coal sheds, chicken houses, etc."

In the same connection there is published the following method which a North Dakota builder used with good satisfaction in putting concrete roofs on a few of the houses he had erected:

"I cover the roof boards, which are already in place, with brown building paper, although tar paper might be better, to prevent the boards from swelling. Over this I put on an ordinary poultry netting, lapping each strip 4 inches or 5 inches and wiring them together. When I put on the concrete I take precaution to raise up the netting so that it will be embedded in the concrete nearer, of course, to the bottom than to the top.

"For the concrete I use a 1:3 mix of cement and a well-graded sand. This mortar is put on 1½ inches thick and well worked around the netting. In the valleys I use tin exposed about 3 inches or 4 inches.

"For very long roofs I put in double netting also, running two strips at right angles to prevent contraction cracks."—

Phenix Hangers and Fasteners—for Storm Sash



SIMPLE—easily applied—rust-proof—non-rattle—and practically unbreakable. Positively the best storm sash and screen hangers and fasteners you can buy. If not at your dealer's, send for samples today. Hangers only, 10 cents retail; hangers and fasteners, 25 cents. Catalog sent on request.

Phenix Mfg. Co., 048 Center Street, Milwaukee

Lumber at Fault.

"Don't paint a new house as soon as it is finished," is the advice given by a paper devoted to this business and the reasons are as follows:

Today most lumber is kiln dried. This means that seasoning has been artificially forced. The pores of the wood are open and will soak up moisture. Besides it contains all the salts and acids of the wood in concentrated form, which, if not removed in some way, will prove detrimental to the durability of the paint. For this reason, it is generally thought advisable to allow a new building to stand for a month or two unpainted, says a writer in Varnish Talks, so as to permit washing out of the surface cells, and allow for the closing of the pores which have been unnaturally opened. Then, after a dry spell, which will remove any moisture absorbed by the wood, is the ideal time to apply the priming coat.

A Dutch Bungalow.

One of the latest additions to the houses of the summer colony at Newport, R. I., is a Dutch bungalow of stone and brick pointed with a white cement and relieved with blue trimmings. The dining room of mammoth proportions is finished in Flemish effect. The drawing room in the front faces the ocean and is 60 ft. long, 15 ft. wide and 10 ft. high. It is finished in redwood. The reception hall is finished in oak and the sun parlor facing the ocean is finished in cream white.

The sleeping rooms, each with its bath room, are in white enamel and are finished in the Dutch style. The upper part of the house is devoted to the servants' quarters of 15 rooms and four bath rooms.

The floors are done in cement—black or blue according to the decorations—and are covered throughout with rugs. All the furniture is of the Old Dutch style. Some rooms have large open fireplaces fitted for log burning or heating by electricity.—*Building Age.*



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Up-to-Date 100 Selected Designs Bungalows, Cottages and Homes, Price.....$1.00
Eighth Edition, 200 Selected Designs Cottages and Houses, Price 1.00
50 Design Book "Bungalows and Cottages," Price..... .50
One Large and One Small Book, Together $1.25, Three Books..... 2.00

Many pretty one-story Bungalows and Cottages. Church Portfolio 50c. If you want the BEST RESULTS, consult a man of experience and reputation for GOOD WORK. If you want a small ECONOMICAL HOME, don't fail to send for these books.

CHAS. S. SEDGWICK, - 1135-K Lumber Exchange, - Minneapolis, Minn.

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For Bathrooms, Kitchens, Hallways, etc.
We carry a most complete line of Ceramic Mosaic Floor Tile and Sanitary Glazed Wall Tile for every purpose. Our designs are

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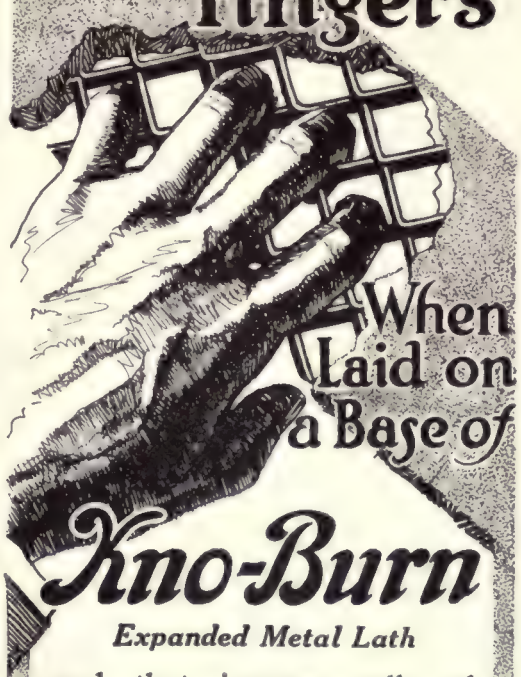


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THE ARCHITECT'S CORNER

What Is YOUR Building Problem?

Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

Relative Cost of Materials.

W. C. C.—We are going to build a stucco house this spring and as it is a new thing with us (there are none here), we would like some information. Which is best to use for frame work, tile or wood? What is the difference in cost? What kind of stucco is best to use? I notice in your April issue in answer to H. O. S. you said the stucco finish had been on for nine years. Did you use wood or tile and what kind of stucco? Can you tell us the difference in cost of asbestos shingles and tile for roofing?

Ans.—In the matter of construction, whether a wood, frame or a tile wall, would say that your choice in regard to this is a relative matter, by which I mean that it depends on the amount you want to spend on your home. Either form of construction is good and a frame wall with metal lath and stucco exterior will make a perfectly satisfactory and good, warm house, and will not cost as much as a tile wall. Of course the tile wall gives you more fireproof construction, and in that particular might be considered better.

We generally specify the use of poured Portland cement in proper mixture with sharp sand as the best and most durable mortar to use for the stucco work.

In the item, answer to H. O. S., in April Keith's, have to say that the wall construction was frame with the stucco as above described.

There is some difference in the cost of asbestos shingles against tile roofing, in favor of the former. The difference is again dependent upon locality and the style of tile roofing selected.

Attic Chambers.

I. J. C.—Is it feasible to put the bedrooms of the upstairs family in the attic of a duplex? Would not they be pretty warm in summer?

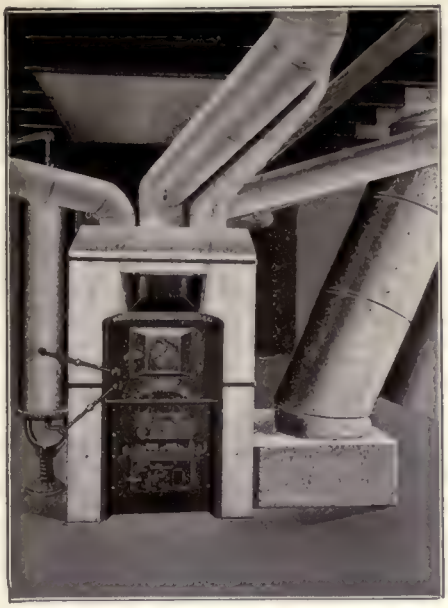
Ans. — If I understand your inquiry correctly, it is to know whether it would be practical to put bedrooms in the attic of a duplex house; that is, and have those rooms comfortable in the warm summer months. Such rooms would be as comfortable as attic rooms in any residence, but if they are plastered and have sufficient ventilation and windows either in the gables or dormers, they ought to be reasonably comfortable; but of course will be somewhat warmer than the second floor rooms.

There are no means of getting away from this without going to the expense of an extra roof lining or a double ceiling. I think you could help this matter very much by covering the under side of the roof rafters with a layer of insulating felt, over which you could nail wall board. This would give an air space of some 6 inches and would help materially to keep out the heat.

Sound-proofing Floors.

W. R. L.—I want to build a duplex house and want to have it as nearly sound-proof as is possible. Is it possible to make it absolutely sound-proof, and if so, how would you suggest doing it? It is to be a frame structure.

Ans.—A good way to make the floors sound-proof is to use what is known as a deadener, or insulating quilt, which is laid between the floor and the stud partitions.



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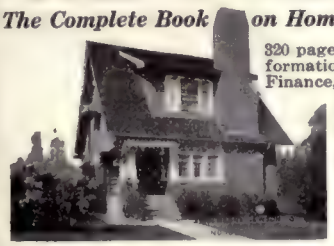
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SPLINTERS AND SHAVINGS

The Planning of Small Houses.



IT is a proverbial fact among architects and builders that every man strives to build a larger home than he can afford. Even the man who builds a three-room bungalow goes into debt before the home is complete in order to have it a little better than he might get along with for a while, at least. The man who (without persuasion from his architect) voluntarily decides to see how small he can build a home and have it fill his needs would be a curiosity to the average builder or architect.

The planning of a small home is more difficult than the planning of a larger one to meet the requirements of the same family. Not because the arrangement cannot be as convenient, for anything built on a large scale can be built on a small scale, within a certain reasonable minimum, but because the average person has an exaggerated idea as to how much room he needs for living purposes.

When sitting in the parlor, with two or three friends, the actual space that is taken up together with the usual parlor furniture is not considerable; when the dining room is openly connected with the parlor, the effect of distance prevents a cramped or stuffy appearance.

In the dining room, of course, the size of the table, together with the fact that a passage must be maintained around the outside of the seated guests, establishes a ten-foot minimum for the least dimension. The dining room should be made a little longer than its narrowest dimension, to permit extension of the table on special occasions. This extra length is often obtained by projecting a bay, which, when properly designed, adds to the attractiveness both within and without.

Some people think they simply cannot get along without a den. The writer admits that he is one of those people. A little place, even if not more than five feed wide, in which to study, write, read, or converse privately, is always a convenient accessory. Placing a comfortable couch in it makes an extra bed room on special occasions. In a small home, however, this space can be distributed between the other rooms and one of the bedrooms furnished to take its place. The number of chambers is, of course, established by the number in the family and the number of expected guests.

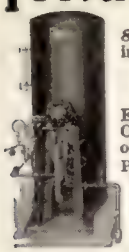
A fireplace is always a splendid thing in any home, for its cheerfulness and the heat it affords on mild winter days, as well as being a splendid ventilator at all times, but it is expensive and takes up altogether too much room for a small home. It should, therefore, be omitted, together with such desirable but unnecessary luxuries as a first-floor toilet room, large pantry and conservatory.

For the best appearance a home of small dimensions should not be full two stories high. Making the height of the first story not over 9 feet increases the size of the rooms in appearance and makes it unnecessary to project the second story quite so high into the air. While it must be admitted that a slant in the bedroom ceiling is not the most desirable thing, still, when the slant starts not lower than 5½ feet or 6 feet from the floor, it is not in the way of bedroom wall furniture, and does not interfere with head room, even at 5½ feet.

When the slanted part of the ceiling is insulated properly from the weather and the room is properly ventilated, it does not make the room either hotter or colder; in fact, it requires a little less heat radiation in winter.

From an investment standpoint it is a significant fact that small homes containing a sufficient number of rooms and all modern conveniences sell better and at larger profits in proportion to the investment than larger and more costly homes, which would indicate that the average home builder would be content with rooms not quite so large as he thinks is necessary when planning a

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home if he could only see a home in every other way meeting his requirements, with rooms just large enough to be practical and homelike.

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With the thoughts of spring house-cleaning comes the realization of the need for general improvement of our own door yards, our neighborhood, and beyond that, the town or city in which we live.

The Outlook, in the following article, gives an example of what was accomplished by one man by the organization of a Civic Improvement Association in his town. Can you not do as much for yours?

Suburbs, no less than slums, need redemption. Merion, as beautiful a suburb as Philadelphia or any other city in America possesses, needed redemption from selfishness, individualism, social indifference, an unwarranted sense of security and crude disfigurements. Or at least Mr. Edward W. Bok believed it did.

Mr. Bok lives in Merion and he believed that it might be made much more delightful as a place in which to live. Merion had been contented, because it had a reputation for being a suburb of wealth and exclusiveness. But all the while it was unconsciously suffering from deprivations, inconveniences, and blemishes that a middle-class manufacturing town would not tolerate for a month. There were infrequent semi-luminous blurs of yellow gas-light by way of illumination, gutterless roads, mud trails or cinder tracks for sidewalks, scant and precarious fire protection, a miniature and somnolent police force, an annual crop of mosquitoes, and many other things quite reminiscent of the dark ages and quite anachronous in a modern American suburb. And it was all overlooked, tolerated, extenuated, because Merion had no corporate or communal consciousness; it is not a village, or even a polling district, but simply a cluster of beautiful homes set in well-kept grounds, inhabited by busy, wide-awake and delightful American citizens.

Obviously Merion needed a community soul, and when Mr. Bok proposed the creation of a civic association a new community was born.

The first thing necessary was a fearless stock-taking, and a survey was made by experts from the Bureau of Municipal Research. They mapped out the more obvious needs and sketched a prophetic picture of possibilities. Next the Merion Civic Association incorporated and engaged a secretary to see that the work designed should be properly carried out. One of the earliest discoveries was that the fire protection was entirely inadequate. By arranging with the fire companies of adjacent suburbs to respond in case of need, by erecting eight fire gongs, by periodic testing of hydrants and the placing of many new ones, the insurance rates to residents have been lowered between twelve and one-half and thirty per cent. The police force has been nearly quadrupled, and a police whistle has been furnished to every woman in Merion. The old gas lamps have given place to electricity, and the distances between standards reduced so that Merion is about the best lighted rural community in the country. An expert was engaged to examine the milk supply, and no milk can be sold in Merion except from dairies that are registered as sanitary. Once a month the drinking water is tested in the laboratory of a professor of the University of Pennsylvania, and a printed report sent to each resident.

From the standpoint of beauty the work is even more remarkable. Where the Pennsylvania Railroad passes through Merion the sides of the cuts and fills have been planted thick with clambering roses, and in the season they are worth going hundreds of miles to see. The standards of the new street lamps are of iron, and the lanterns, octagonal in shape, are of solid copper. Architects and experts pronounce them at once beautiful and practical. All of the street signs are of cast iron and of artistic design, and the speed limit warnings are similar. Thousands of magnolias, red-flowering horse-chestnut and dogwood trees have been planted by the roadsides.

Only two years ago Mr. Bok launched the Civic Association. If the plans now under way are carried out, as they will be, Merion may standardize ideal suburban life, certainly for Pennsylvania, possibly for the United States.



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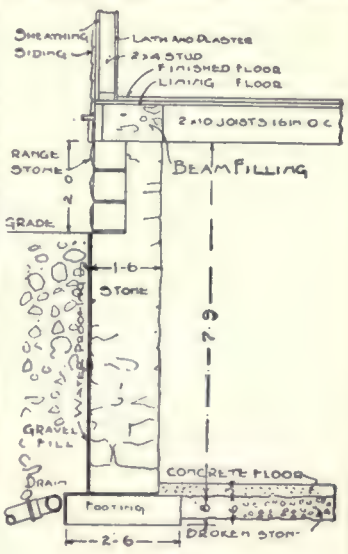
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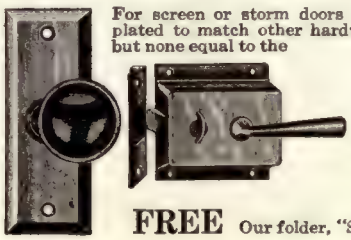
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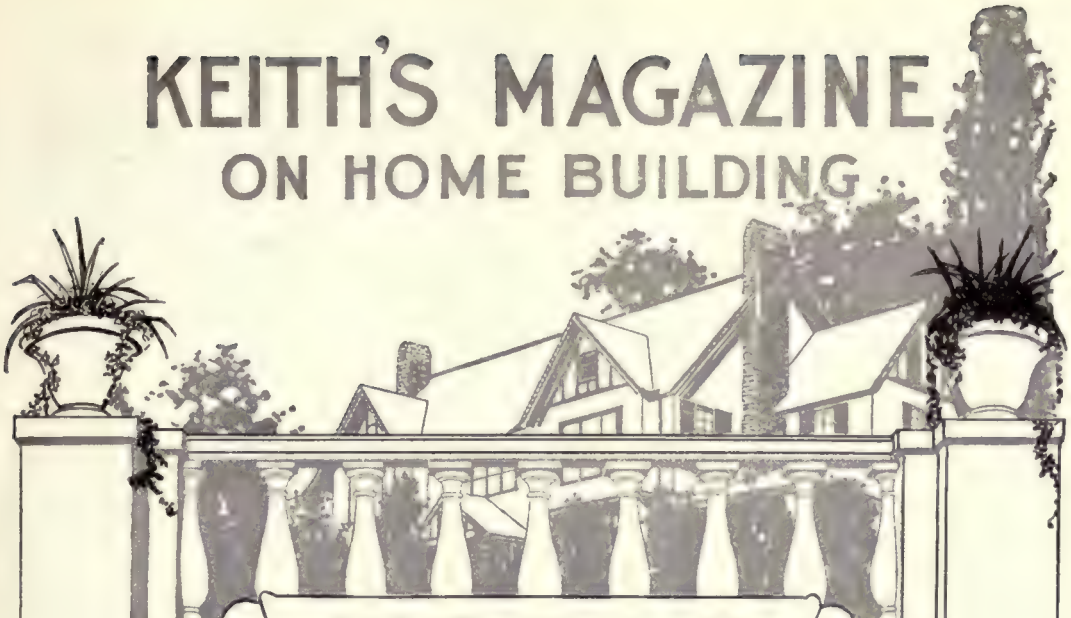
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KEITH'S MAGAZINE ON HOME BUILDING



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A beautiful garden setting which overlooks a pool and flower beds and the water beyond.

KEITH'S MAGAZINE

VOL. XXXIV JULY, 1915 No. 1

Making the Ideal Country Home from An Old House

Warfield Webb

THE idea of changing the old home into a modern structure did not at first dawn upon the purchaser of this old farm house and the adjoining land. In fact the original plan considered, which had been given careful study, was to use the old house as a home for the farm superintendent, and to erect at some distance, a new home with all the modern ideas incorporated therein. It was while planning the new house, during the owner's residence there for several summers, that the possibilities of remodeling the old house were conceived.

Now this is a subject that always demands care and very special forethought. Should the plans be undertaken and the scheme then found to be impracticable, there will follow a loss that is not readily appreciated.

In this case the owner called into consultation his brother, who is an architect, and the matter was carefully considered and preliminary plans for a new home prepared. But in the meantime the old place had developed latent possibilities, and an inspection of these revealed that it had been built to withstand the ravages of time, and was intact, so far as the essential parts were concerned.

The structure was studied, not only as to the construction but also as to the needs of the new owner, and what was possible to work out of the present building without any undue loss of time or serious errors. The original part of the house, that is the section without the rear wing, was built about seventy-five years ago. The latter was erected something like twenty years ago, and a careful inspection proved that the beams and joist were of solid oak and in fine condition.

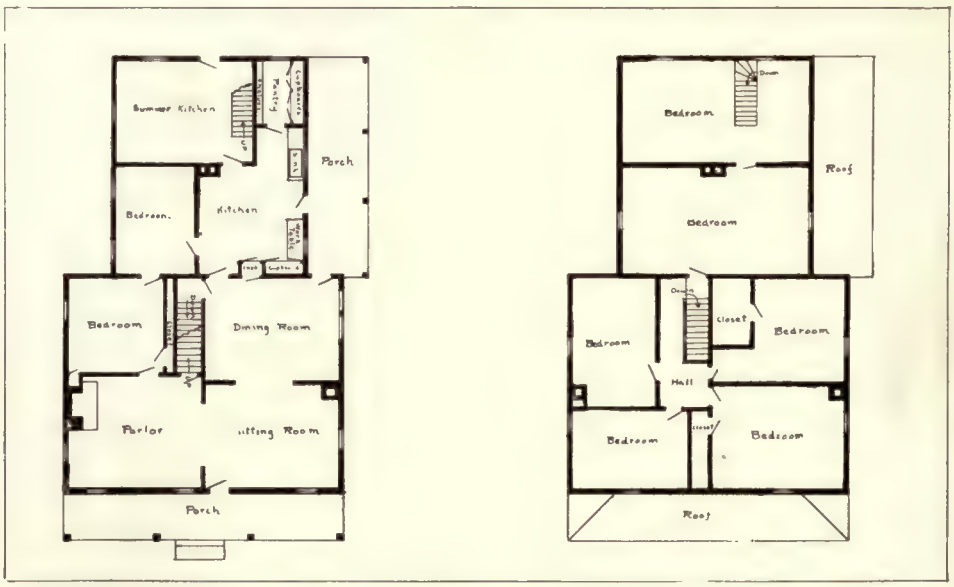
The house itself was of an old fashioned type, very common half a century ago in Ohio, where it is located, and was easily remodeled on colonial lines, which was the style most desired by the owner. The general plan then determined upon was the colonial type. The rooms were large and fairly well arranged, so that the labor of remodeling was made less complicated. In the planning several different ideas were suggested for the first floor. One of these was to arrange a center hall, with living room and dining room on opposite sides, and a colonial stairway in the hall. Another suggestion was to make a large living room across the entire front by removing the center partition. Neither of these ideas seemed just the plan desired, and they were abandoned for the one that was finally determined upon. It was found that should the above plans be adopted they would involve extensive changes, owing to the framing of the house, which was of the old fashioned barn-frame type, and the removal of any of the partitions would weaken the frame



A view of the old farm house—before being remodeled.

of the house perceptibly.

The final plan determined upon was to leave all the partitions practically as first placed, and by adapting the various rooms to new uses, it was possible to secure a modern home, combining the comforts and latest ideas, with only a nominal cost; far less than would have been demanded for the erection of a new home, and which would have lacked the charm



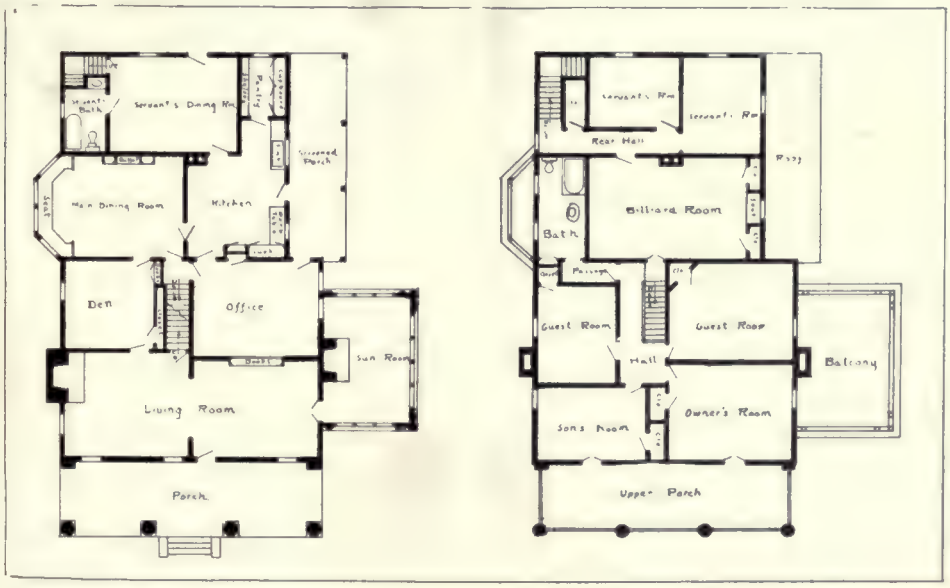
Floor plan of the farm house



The new house – after being remodeled.

given by time that is now so strong an element in the present structure.

In planning a change for the front exterior, it was decided to build a two-story portico across the entire front. The change made the entire house an ideal one from this viewpoint. The addition of a sun room on the east side, and the further construction of a rear wing on the west side on a line with the main structure,



First floor plan. **The remodeled house.** **Second floor plan.**

completed the exterior changes in the original planning.

When the interior plans were studied, it was noted that the old dining room was too small for the owner's requirements, so it was converted into a farm office; it being found the best adapted for this purpose, having an outside door to the rear porch. As an office was an essential feature here, the plan worked out admirably. The removal of the old pass cupboard to the kitchen and the building of a partition dividing the space permitted the building of a book case for office use therein.

The original opening to the sitting room from this apartment was closed and the erection of another book case, five feet high, was made possible. The space above the book case to the top of the door was filled with leaded glass casement sash, making thereby an additional artistic factor to both rooms. The sun room, opening from the living room, is one of the most pleasant and generally used rooms in the house. It has windows on three sides, but with an open fireplace and ample radiation it is comfortable in all kinds of weather, and is a dream spot for the weary. The window from the living room on this side of the house, was converted into an opening, with double French doors, thereby giving access to this room. The former sitting room and parlor are now used together as a living room, there having previously been a wide opening between these rooms.



A view in living room, showing boulder fireplace.

Now in order to give the house an added feature of attractiveness, the chimneys at each end were torn out and new ones were erected from the cellar up, on the outside of the house; which while making a pretty addition avoided the corners projecting into the upstair chambers, as they did in the old house. There were two new fireplaces built in the house, one in the living room, and one in the sun room. These fireplaces are of boulder



Oak paneled wainscoting and beamed ceiling.

type, and while not typically colonial, are none the less appropriate in the section where the house is located, there being found in that part of the country some of the finest boulders in America. Then the boulders used in the construction of these fireplaces were all gathered on the farm, and were laid up by a man who lives in the neighborhood, and is an expert in this kind of work. One can judge of the nature of the work by a glance at the view shown of the same.

The small bed room at the rear of the old parlor was converted into a small den or lounging room, and has also proven to be one of the pleasant features of the home. The narrow closet next to the stairs was shortened sufficiently to permit of a built-in bookcase. The bed room at the rear of this and the opening from the kitchen was converted into the main dining room, which was also made larger by the removal of the west wall, using the additional space thus secured. This made possible a very comfortable and ample dining room. This room is finished in oak, with paneled waiscoting and beamed ceiling, having also a built-in buffet and china closet. The bay window at the west side, with seat below running its entire length, gives ample light, and adds to the comfort and the homelike ease of the apartment.

By plastering and finishing the summer kitchen at the rear of the kitchen, and the removal of the old stairway, which was placed in the addition, as well as the erection of a bathroom in close proximity of the stairs, a nice combination was made possible. This new room makes a de-

lightful dining room for the farm help, and is likewise handy to the kitchen for service. No changes were made in the kitchen. It was previously well provided with cupboards, work table, sink, pantry and other conveniences.

With the exception of the paneling in the dining room, the woodwork in all sections of the house was retained. It was, however, all refinished. With the exception of the den, which was grained in butternut finish, the other apartments were painted with white enamel, making the interior bright, clean and very attractive. New oak floors were laid in all the rooms of the first floor except the kitchen and rear dining room. A system of vapor heating was installed, also modern plumbing, with two bathrooms. Water for all purposes is supplied by means of a subterranean pumping system.

In planning the second floor there were few changes made in the arrangement of the main rooms. The two front windows in the chambers were converted into French doors, thereby giving access to the sleeping porch over the front porch. The long closet in the east front room was divided, and a door cut into it from the west room, making possible a closet for this room. Full length plate glass mirrors were placed in the closet doors in the three main rooms, which add to the cheeriness of the same. The rear bedroom on the west side was shortened sufficiently to allow for a passage to the bathroom, which was placed in the new addition in the rear. This bathroom has tiled floor and wainscoting, with pedestal lavatory, porcelain built-in bath tub, and all the fixtures of the very latest and best type.

The large bed room at the rear of the hall was converted into a billiard room, being another of the pleasant apartments in this home. Two bedrooms were planned for the help at the rear of this; these opening off a small rear hall, communicating with the rear stairs. The woodwork in the bedrooms was finished in white enamel, the billiard room in grained wood, and the floors finished with grain effect for rugs.

As there was previously an acetylene gas plant in the house, it was determined to retain this for the time being, together with the original lighting fixtures, because the power for electric lighting will soon be installed and new fixtures will then be placed in the house. The power for the electric light is to be secured from a car line not far distant.

The total cost of the work of remodeling was in the neighborhood of $5,650. This included everything, plumbing, waterworks, painting, excavating cellar for heater, and other details. No expense was spared to make it an ideal home and the results are such as to prove the plans have not miscarried.

As to the setting of the house and its surroundings we might add a word. In the original planning of the house there was one objectionable feature. The house was located too near the public road. To obviate this an agreement was made with the road commissioners to remove a bend in the road above and below the house, thus moving the road at least 150 feet from the house. A landscape gardener was employed to lay out the grounds, and shrubbery, trees, flowers and other atttractive features were added. The setting is very pleasing, and standing as it does in an acre of lawn, there is ample room for making this an ideal country home, such as the future plans of the owner promise to develop.

Hospitality in Bungalow Furnishings

Margaret Craig

IN furnishing the interior of any home, the decorator is continually aware that his choice of furniture must be consistent with the style of architecture that the house exemplifies. He knows that if the house is Mexican in type, that it should not be treated as an English cottage.

At first the bungalows were unplastered, and rough in finish; but that is true of very few of the popular bungalows of the present time. Naturally, these bungalows demanded a more rigid treatment, and the Mission furniture with its severe and angular lines was appropriate.

Now, however, as the walls of these small homes are usually plastered, the walls are tinted in various pleasing tones, and the furnishings are less forbidding.

The question is asked by the analytical house-maker: "What are the elements that essentially make a house attractive?" The answer is always the same,—"Comfort and Hospitality."

We all want about the same things, but different as to appearance. In the living-room we desire easy chairs; at least one table on which can be placed the late



Green and white make a cool color scheme.

magazines and some interesting literature; several bookcases near at hand; and a fireplace for extra warmth, which always adds to a family sociability. In addition to these a couch for a few minutes' rest, and several well chosen pictures to gaze into and to be wafted back to some historic times, or into the sun rays of a restful meadow. Several of the illustrations answer to these demands.



The bungalow with vine-covered porch.

The first living-room has none of the sombre atmosphere of the early bungalow. The walls are pale green and the ceiling is cream in tone. The woodwork is white enamel, and as there are beams across the ceiling as well as a heavy mantel piece, it is consistent finish for a bungalow interior.

Above the windows and doors the narrow lintels give some individuality to the room.

The fireplace is faced with square, greenish gray tiles, which have given the principal color note. A built-in bookcase, next lends its white lines, and its broken mass of bright-colored bound volumes adds most pleasantly to the scheme.

Most mantels are adorned in a symmetrical fashion—but here, small ornaments have superseded the formal method, and as a group have formed a successful mantel decoration.

Green sunfast curtains are used at the three groups of casement windows, and the owner keeps the room supplied with green fernery, or vases of pink, yellow, or heliotrope to carry out the color composition.

The next illustrations show one exterior and several interiors of the El Mirasol in Santa Barbara. This is a charming structure, built of white plaster, toned down by green lattice work supporting flowering vines, and made very interesting by red tile roofs, and bright flowered window boxes



El Mirasol at Santa Barbara.

Nothing expresses hospitality more alluringly than the inviting porch. The treatment at El Mirasol is unusually successful. It is low and inviting, pergola roofed and vine covered. Porch furniture has received a large amount of attention, with the growing American feeling for living, sleeping and eating out of doors. Reed and willow porch furniture has responded to the demand as an ideal material for out of doors. It lends itself both to comfort and beauty.

The porch rug is a simple matter, merely a grass mat that is soft under the foot, but a great necessity, especially with a tile floor.

The El Mirasol porch bespeaks both comfort and hospitality. The illustration shows the charm which it imparts to the house. Its simple furnishings are in



The invitation to enter.

keeping with the open porch, and the simplicity of its lines and open prospect. Comfortable chairs, a table for books and papers, a wide view, roses overhead and flowers about: What more could one desire?

The interior decoration of this characteristic California home is very appropriate as well as unique. The walls are French gray, and form a lovely background for the cretonnes and English

We also realize that simplicity is evidence of the best taste.

Elaborate gold frames, an elaborate display in curtains or scarfs, and gilded chairs are of course inappropriate.

As the average bungalow is designed with careful consideration for space, built-in furniture has been adopted very extensively. Bookcases either side of the fireplace or along one side of the room;



Dark lines give an accent.

prints that are applied as draperies. Dark lines, similar to the dominant colors in these draperies outline panels on the wall and appear on the furniture as definite accents of color.

The desks are most attractive. Ivory in color to match the woodwork and most of the furniture, they are each supplied with Hesterloom lamps, which have the floral shades and standards, designed with raised patterns in color. Quills stand in glass dishes that contain similarly colored glass shot.

seats that have hinged tops; cupboards and china closets; or sideboards with a series of drawers for the linen are all frequently constructed as part of the framework of a bungalow.

The draperies used in a home of this style are generally of a little coarser texture than in houses of the strictly Colonial, Elizabethan, or Italian,—although silk is always satisfactory. Cream colored scrim, velour in its lovely shades of yellow, green, or blue, monks cloth, pongee, cretonne, Japanese prints are attractive

for the living room of the house.

Rugs need not be Oriental to be effective. Crex, grass or rag rugs, if used to carry out the harmony of the room are excellent. The Japanese Jutt rugs, which are very inexpensive, always have delightful shades of blue and brown which blend with almost all furniture.

Dining room furnishings are much more interesting when simple. Some of the loveliest dining rooms are finished in blue with a dash of yellow. Blue chintz or velour curtains and blue rugs, to set off yellow walls are very effective if that particular color agrees with the living room colors.

Bedrooms are usually small, in bungalows, and require little furniture. Consequently they should not be needlessly filled up with a great number of distracting small ornaments as dozens of photographs, jarring banners and bric-a-brac. A bed, dressing table, two straight and one rocking chair, a writing desk are quite enough. A few good prints on the walls and a flowering plant or vine in the window will add to the cosiness.



The desk is ivory in color to match the woodwork.

Planning the Music Room

E. I. Farrington

NO arguments are needed to prove the desirability of planning a music room when the designs for a new house are being made. Such a room is very much worth while, even in an unpretentious home. It provides a spot where it is possible to place the instruments, whatever they may be, to the greatest advantage; and allows practicing to be carried on without disturbing the family. It may be a large and sumptuous apartment, containing a costly pipe organ, or merely an alcove leading from the living room, but it is devoted exclusively to musical purposes.

It is desirable to have the music room on the least exposed side of the house and to have it well lighted. The lighting problem is more difficult when an upright piano is to be used than when the instrument is a grand, for the latter may be given almost any position, while the upright is usually placed against a wall. The light should preferably come from the left or from a little to the rear of the performer. At the same time, it is always

best to have the piano against an inside wall, where the atmospheric changes are less pronounced than against an outside wall. A piano is a very delicate instrument and is easily affected by wide variations in temperature. For that reason it should not stand immediately against a window.

Of course, there is really no reason why a piano should be placed against a wall, like a school boy in disgrace. As a matter of fact, some very interesting and tasteful arrangements may be made with the upright piano as a basis when the instrument is moved away from the wall. The back may be made beautiful with a strip of brocade or an India shawl, a high back settle may be placed against it or it may be hidden with an ornamental Japanese screen. And the tone of the piano, it may be said, is vastly improved when the piano is moved into the room. Even if the piano must be given the conventional location, it should stand two or three inches away from the wall, or better still, should be placed across a corner. Another matter to be considered in the music room is the position of the registers or the radiators. Too much heat, and especially dry heat, is very detrimental to a piano, and the instrument should be kept at a considerable distance from the source of heat. Otherwise, there will be too great expansion of the strings, the glue will be softened and the sounding board may perhaps be cracked. If there is a fireplace in the room, it may be necessary to place a screen between it and the piano. All these little points may be considered when a special music room is being designed, where as in an ordinary living room there are many pieces of furniture to be placed and the position of the piano is likely to be arbitrarily fixed by conditions which cannot be changed.

Sometimes it is desirable to isolate the music room so far as possible, especially if there be a professional musician in the family who must use the instrument for hours at a time. This is a problem best solved by packing the walls with some of the various insulating materials on the market. The expense is but little and the effect is striking. Doubtless the most satisfactory music room of all is one which is built out from the rest of the house and is but one story high, making possible a large window in the ceiling. If stained glass



The music room in an elaborate house.

be used in this window, a very handsome effect is obtained. When double doors are used to connect a music room of this sort with the living room, the former may be practically thrown into the latter or entirely isolated as may be desired.

It is not unusual to build on a special music room when a pipe organ is to be installed in a house already standing. A room secured in this way is shown in one of the illustrations. There is a large pipe organ in this room, as well as a grand piano. The many long windows on two sides make the room practilally a solarium in the afternoon, and there is a stained glass window in the roof. Double glass doors connect the music room with the rest of the house and smaller doors lead to a porch. The organ itself is walled in at one end of the room, but the console stands in a well lighted position in front of the window.

It is an interesting fact that the pipe organ designed for use in the home has come into wide popularity within the past few years. For a long time the pipe organ was suitable only for a church or large hall, but when the demand for organ music began to be appreciated by the builders, they set to work to develop an instrument which should be adapted to the private residence and the result has been all and more than was to be expected. These home organs are essentially different from those made for churches. While carrying the same musical qualities, they have more delicate tones and possess an orchestral brilliancy not to be desired in public instruments. The pipe organ for the home is distinct in scaling, voicing and arrangement from



A successful music room added to an old house.



A reed organ may be built in place.

that built for a church. This point is emphasized because it is not always understood. The pipe organ for the home must be built for just the conditions it will meet in the home, where all sorts of music from ragtime to Bach's fugues will be played, and where the thunderous tones of the church organ would be quite out of place.

The home organ is commonly played by an electric-pneumatic action which requires less effort than the playing of a piano. Also, the console may be placed in any desirable position without regard to the organ. That means that difficulties of lighting are easily overcome and that the instrument may be installed where it would be impossible for the player to sit. Occasionally a small room is given up to the organ, which may completely fill it, the pipes being exposed through the partition of the music room, where the console is located.

Many expedients are adopted to find a place for a pipe organ in houses already built. Sometimes the instrument is given a location on the second landing of the hall, with the console perhaps on the floor below. It is a simple plan to place the organ on the second floor directly over the music room, if a chamber can be given up for the purpose. Then the ceiling of the lower room may be torn away and an ornamental grill substituted, allowing free passage of the sound. It is not often that some way cannot be devised for getting a pipe organ into any house.

The pipe organ is much more common in American homes than most people suppose. It is not a luxury which the rich

alone may enjoy, for a very creditable instrument may be purchased for as low as $1,200. The price, on the other hand, may run up to $50,000, but in the latter case much of the money will be spent for decoration, elaboration and special features, including, perhaps, an echo organ. A large organ is pretty certain to have a full set of chimes or a harp, and possibly both. Wonderful results may be obtained with such an instrument, for the light operas may be performed just as readily as the most impressive legato music.



There is too much bric-a-brac.

Many, perhaps most, house organs now built are with an automatic playing device, by means of which the world's best music is at the command of a man or a woman who does not know one note from another. The registration may be governed by the performer and he may give his own interpretation to the music being performed while wholly lacking in organ technique. Sometimes the automatic player is enclosed in a desk or table, where it is out of sight when not in use.

The work of installing a home organ would be much more complicated if wind for the bellows had to be supplied in the old way. Electricity is most commonly called upon to operate the blowing plant for the modern organ and a little motor with a fan blower is located in the basement, the attic or any other convenient spot, the wind being piped to the bellows. Water motors are sometimes used, but are less reliable. Gasoline engines are found satisfactory in the country where electricity is not to be obtained. When a music room is being planned for a new house and is to include a pipe organ, this room should be twice as long as it is wide, while the height should be equal the width. It has been found that these proportions are the best for obtaining the most pleasing results from the average home organ. Whatever the proportions, however, it is very desirable to have the room at least ten feet high.

It is not at all difficult to have a music room in which a consistent decorative scheme is carried out. Organ makers in particular are thoroughly familiar with architectural and decorative possibilities. Their instruments are made to fit in with any scheme which may be desired, this result being the more readily accom-



A pipe organ may be made to fit into any scheme.

plished because of the fact that the pipe organ for home use is generally made to order.

The well ordered music room is very simply furnished and preferably should have a hardwood floor. The number of heavy draperies and rugs should be reduced to a minmum, for they tend to absorb the vibrations and therefore interfere with the tone qualities of the instruments being played. It is well to use but few pictures and fewer ornaments, if the music room is to approach the ideal. And above all, the piano must not be littered with books, music and bric-a-bac. This is done in the best of homes, but the sight is a painful one to the real music lover, for he knows that no piano can be heard at its best when used as a repository for ornamental odds and ends.

"When the heat like a mist veil floats,
And poppies flame in the rye,
And the silver note in the streamlet's throat
Has softened almost to a sigh
It is July."

—Susan Hartley Sweet.

Rustic Fences and Gates

M. Roberts Conover

WHERE the home plot allows room enough for vines and shrubs, rustic fences and gates blend too well with trees, vines and shrubs, to be ignored as enclosures. A rustic fence is very pleasing about a garden and even where one does not use a wooden fence a rustic wooden gate may look extremely well with a vine-covered stone wall or a hedge as an enclosure.

Of course one often sees mistakes in the use of rustic gates. If such a gate is used where there is no enclosure or is combined with a classic balustrade, it becomes meaningless or ridiculous, as the case may be. Then, too, there are fences and gates of rustic finish that are rickety and unstable in appearance, but such mistakes should not prejudice one against the appropriate use of the rustic gate or fence.

While rustic fencing has not the permanency of stone or iron, yet good work will last for several years. An experienced woodworker says that when sound red cedar is used and the wood securely joined, rustic fencing lasts from ten to fifteen years.

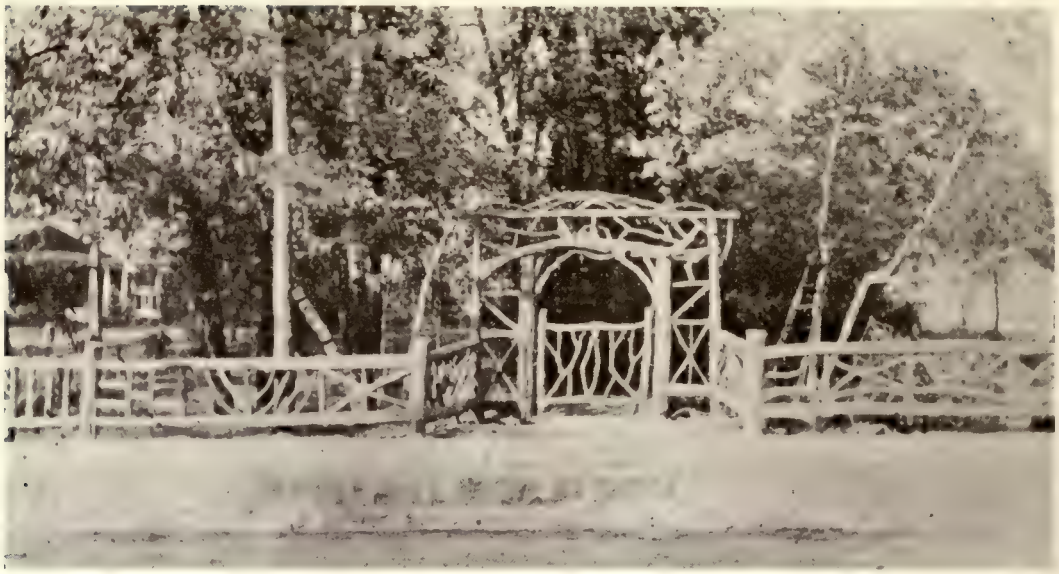
The adherence of the bark depends upon the choice of the wood. No treatment will help to keep the bark on.

Either the wood of evergreen or of deciduous trees may be used.

Evergreen wood should be cut in August and used green. The wood of deciduous trees is cut in December and January and seasoned before using. Red cedar is the best for fences. Sassafras



(1) A satisfactory design for a rustic gate.



(3) This gate may be vine covered.

ranks next and chestnut third. Laurel is fine for rustic work that is to be varnished.

The best method of joining the parts is to use wire nails that are long enough to reach the heart of the stick and will last as long as the wood. Bolts are used for fastening together the parts of gates.

Illustration One is a simple, satisfactory design for a rustic gate. Structurally it is pleasing. There are no weak lines.

Illustration Two shows an entrance gate which is interesting because it is well adapted to the foliage setting. This



(2) Rustic gate adapted to the foliage.

is used as an entrance to a drive leading to a garage.

Illustration Three is a style of gate which gives good support to vines. The Wichuriana or Memorial rose and the Rambler roses look well on such a gate.

Illustration Four is a rustic fence structurally durable because of the stout posts, and the poles at top and bottom and because the other parts are, wherever possible, left as they grew with as few artificial joints as possible.



(4) Durable—with stout posts.

The Man with Five Friends

John Muir, the well loved naturalist, who died recently in Los Angeles, had many friends. During his seventy-six useful "well enjoyed years" of life, from the time of his daily school boy fights in Scotland to his latest scientific triumphs, he achieved many triumphs. One of the most noteworthy, yet perhaps the least known, concerns his five friends.

Although John Muir's home was in the Contra Costa Valley of California, where he could have fellowship with the giant trees that he loved so well, there were five homes in the United States that maintaind each a "John Muir room." These homes were the residences of the naturalist's friends, and the rooms were never used save when he came to be an honored and delightful guest.

The man having one friend at whose door he can knock with the certainty that there is a place made warm for him is fortunate above most men. The man who has five such friends is blessed. There are not many of the things called evil that can successfully attack him, for he has five fortresses to which he may retire. When he goes forth from one of these, he goes armored with love and faith, and his wounds will be slight. But to win and hold so much blessedness a man must be, in himself, an everlasting source of love and faith and friendship. John Muir was such a man.

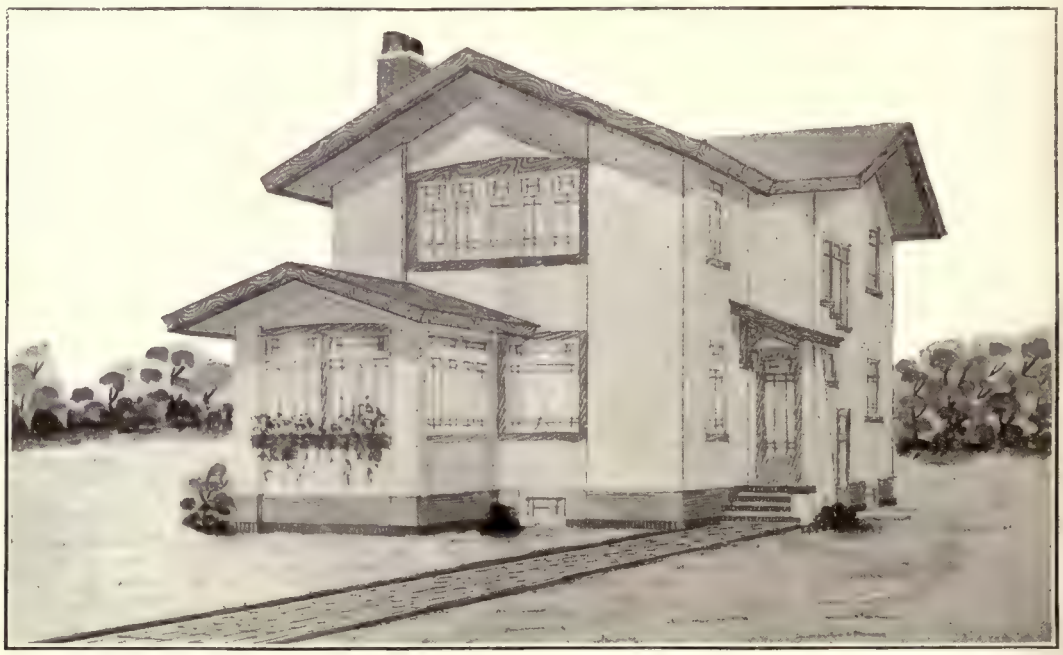
Making the Most of a Narrow Lot

A GREAT many people are required to build their homes on narrow plots of ground and to show what an attractive house one can have, even under these restrictions, the accompanying design has been prepared for an inexpensive cement cottage.

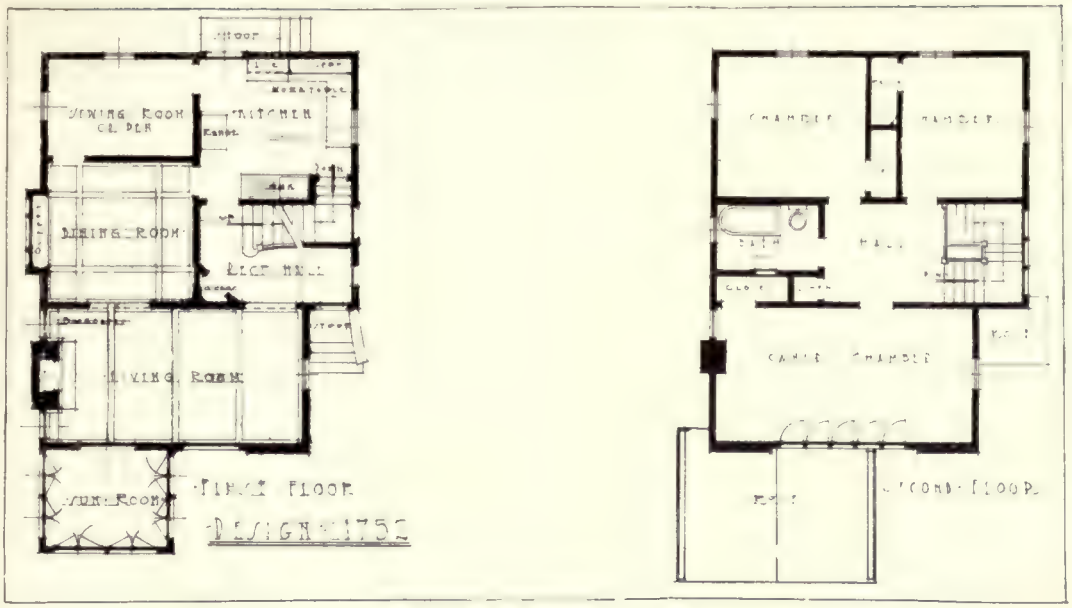
In this design we have an unusually simple treatment of details, the construction of which is very attractive. The exterior walls are of frame, covered with galvanized iron lath and rough cast cement plaster. The walls on each corner of the front are increased four inches in thickness by furring out in order to get the pier-like effect supporting an extra wide projecting cornice. This gives a very substantial appearance as well as enabling the working in of an attractive group of casement windows on the second floor. The soffit of the cornice has been plastered the same as the walls. A rough sawed board is nailed to the ends of the rafters or lookouts, these forming the simple cornice. All exterior mill work is of fir, the same being stained to bring out the grain.

With the sun room extended on the front, the plan is one that can be built on the average city lot and not be cramped for room. The treatment of the entrance at the side with a simple hood supported by a heavy bracket is unique in detail. This entrance has brick steps which, together with the brick walk and foundation above grade give a touch of color to the exterior. The base should be planted with hardy shrubs.

The floor plan is rather unusual, entrance being into reception hall, from which a wide cased opening leads into living room. Here is a good sized room with brick fireplace in one end, flanked with built-in bookcases and high casement



It gives breathing space, even on a narrow city lot.



windows above. The same simple cased opening separates living and dining rooms. This latter room has a built-in "buffet" which is very attractive. To the rear of the dining room is a small room which can be converted into a sewing room or den. There is no pantry; the kitchen being large enough to provide for plenty of cupboard room. Note the recess for a sink, the location of the range, the convenience of the refrigerator and last but not least, the arrangement of the stairs to second floor or down to basement.

On the second floor there are three well arranged chambers, with ample closet space, large bath and linen closet, all opening off a square central hall. The triple stair windows make the double landing very pleasing. There is no attic; the basement providing plenty of storage space besides good laundry and fruit and vegetable room.

The floors throughout are of maple with tile in the bath; kitchen in pine for linoleum. First floor finish is cypress or fir and second floor finish is pine for white enamel. Birch doors are stained mahogany. The probable cost of this cottage, including heating, is estimated at $3,750.00.

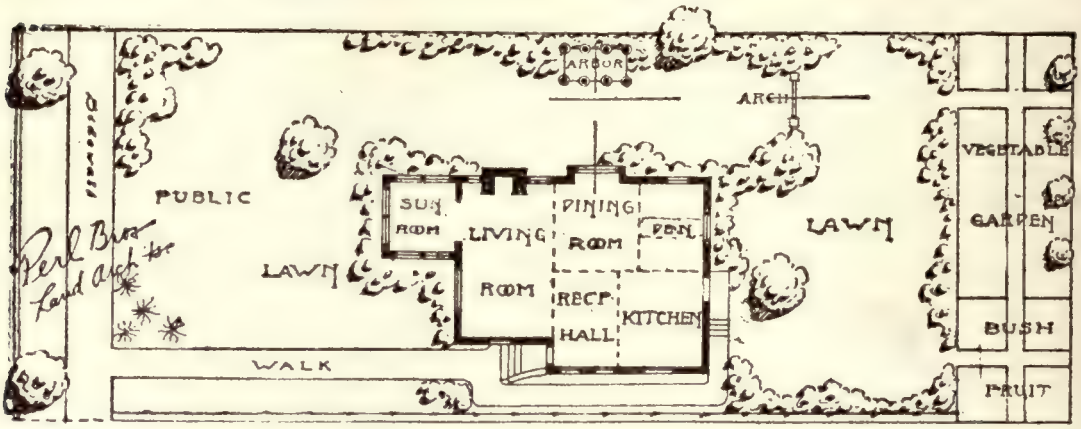
The Lay-Out of the Grounds

Perl Brothers, Landscape Architects

It is usually the decree of the real estate man, for economical reasons, that the ordinary residence property shall be forty feet in width, seldom fifty, and rarely sixty. Such a width is room enough for the house itself, and a narrow lawn at the side. It is quite essential, therefore, that the available space for landscape treatment be used to the best advantage.

In the development of the fifty feet of property for the stucco house just illustrated, a broad open lawn increases the

scale of the residence both in size and pretention, and with shrubbery and evergreens placed at strategic points, a proper setting is the result. A small arbor creates an interesting vista from the sun parlor, living room and dining room. A vine-covered archway leads to a small private lawn, made interesting by the use of annuals and perennials with shrubbery as a background. Through the shrubbery at two points paths lead into the vegetable garden, a portion of which has been reserved for bush fruits, such as raspberries, currants, etc. Four dwarf fruit trees are placed near the rear property line. A collapsible clothes reel may be used to afford convenient drying space. The arrangement affords an interesting, artistic as well as useful solution for a fifty-foot piece of property.



A Modern English Cottage with a Thatched Roof

MANY of the readers will wonder at the caption, "Modern English Cottage," for the word modern in this sense covers a multitude of sins. Twenty-five years ago a house was considered modern if it had a bath and kitchen sink. Then came the heating plant to replace the stove; after this, the laundry, with stationary tubs, and five or six years ago the sleeping porch had to be added. Indeed the styles of houses are ever changing, just as the styles of clothes. This is especially true of the interior plan and arrangement.

At the present day, what must we find or have in a house in order to call it modern? True, the up-to-date plumbing combined with the heating plant will not make the house modern, although these are essential. We must have the sleeping porch. The sun room reached from the living room through French doors all fitted with casement sash, replacing the ordinary front porch. The breakfast room, similarly located off the dining room, easily accessible to the kitchen, where the morning meal and ofttimes the noonday luncheon is served. There must be a fireplace, built-in bookcases, window seats, ample built-in kitchen cupboards, especially if no pantry, entry for refrigerator, plenty of closets, to include linen cup-

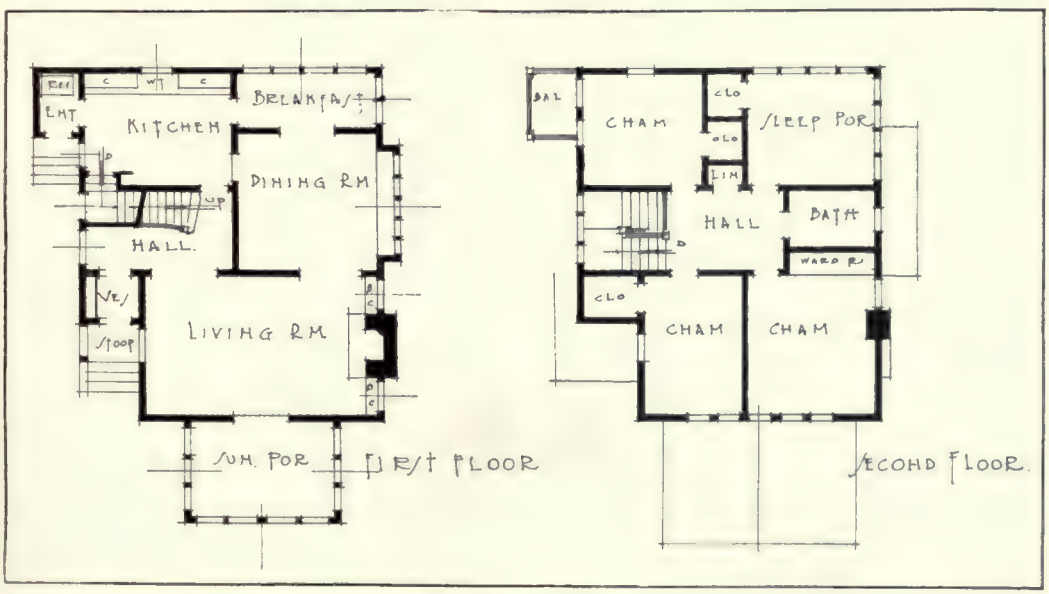


The exterior walls are brick with cement plaster and half timbers above.—W. W. Purdy, architect.

board and wardrobe, and last but not least, the clothes chute.

A study of the accompanying plan will reveal all of the above and many other attractive little features not shown in the small reproduction.

The above place is ideal for the average city lot. The entrance is at the side, into a good-sized vestibule with built-in wardrobe and a seat in the bottom for storing rubbers. From the entrance hall one passes into the large living room across the front finished in quarter-sawed white oak fumed. Adjoining the living room is a fair-sized dining room finished in ash a silver gray. The breakfast porch and sun room are in fir and the kitchen in pine, natural. On the second floor are three good chambers, bath and sleeping rooms, all in white enamel.



The floors on the first floor are white oak with linoleum on kitchen and maple on the second floor, with tile for bath and vestibule.

The basement is most complete, with heating plant, storage and laundry.

A golden mottled brick has been used on the walls up to the first story sill, and above a cement plaster stained a light cream with half timber work in the gable. All exterior millwork is fir stained brown, and the thatched roof a deep red.

Note the little balcony over the rear entry providing a place for airing bedding.

Under a Low Roof

HERE is a plan which surprises and quite pleases the fancy in the number of attractive features which it embodies in an unobtrusive way. The entrance from the long veranda is centered in the usual way. At the left of the entrance is the living room, well proportioned in its lines, but with the interest focused in the inglenook with fireplace, and seats which make one wish for a cool, rainy day, a book or a boon companion. A columned opening connects with the dining room.

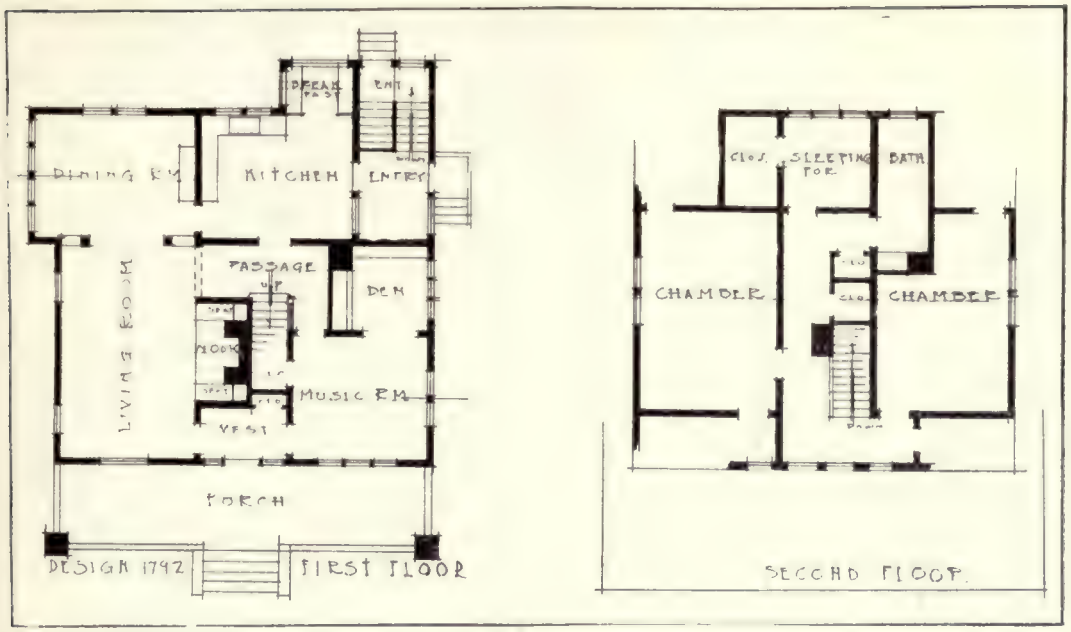
The arrangement of the stairs is unusual and very good, making them convenient yet retired.

The kitchen communicates easily with the stairs and other rooms. The breakfast alcove has been especially well worked out. Here between two built-in seats is room for a small table on which the breakfast may be placed before it is rolled into place. With windows opened, the alcove becomes an open porch. The kitchen has ample space for built-in cupboards. The entry gives place for the refrigerator which the iceman can fill without troubling the housewife, and also gives access to the basement, the stairs having an outside entrance at the ground level.

The space under the main stairs is util-



The graceful lines of the roof extend out over the front porch.



ized to advantage by the coat closet opening from the vestibule and a closet from the music room.

The inclusion of a music room in the plan and the arrangement of the den add other features not usually found in the small house plan.

On the second floor a large chamber is finished off in each of the side gables, with a sleeping porch and bath at the rear under a large dormer. These with the large closets under the roof and a linen and hanging closet complete the conveniences of the second floor.

The graceful lines of the roof extending out over the front porch make a very pleasing little cottage home of the semi-bungalow type with cement walls for the first story and shingles in the gables.

A Picturesque Stucco Cottage

THE size of this cottage is 28 feet in width by 28 feet in depth, comprising three rooms on the first floor and three on the second. It is suitable for an east and south front. It is built frame construction and the outside walls are veneered with a dark oriental brick up to the sill course, and above this the walls are finished in cement stucco. The roof shingles are stained and all of the trimmings, cornices, virge boards, casings, etc., stained dark brown, giving a very pretty and artistic effect. The architect estimates the cost exclusive of heating and plumbing, at from $3,200 to $3,600.

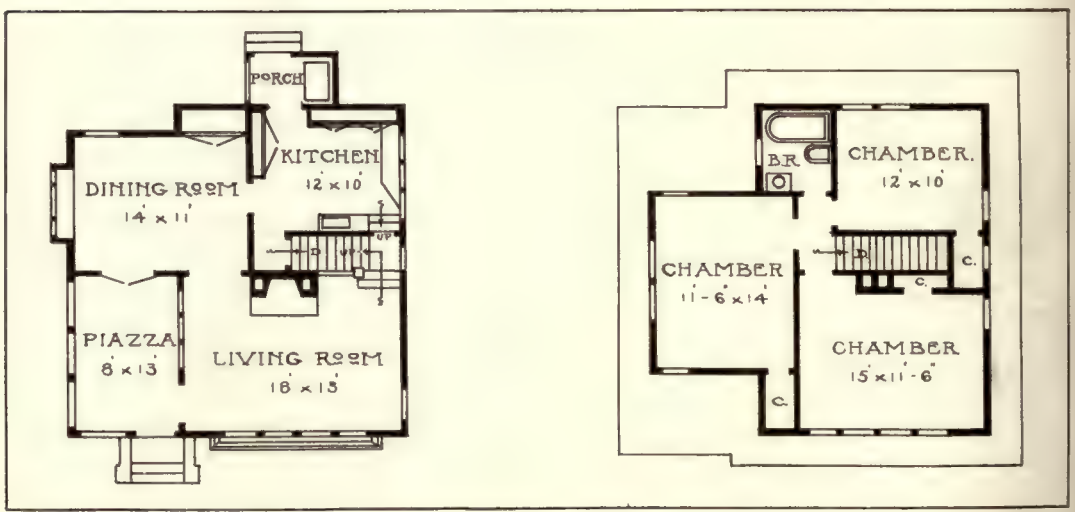
The entrance is from a glazed piazza on the southeast corner and coming under the main roof, the main living room and dining room both opening on this piazza with glazed doors. The main stairs lead up between the living room and the dining room with combination arrangement. The first story is finished in oak

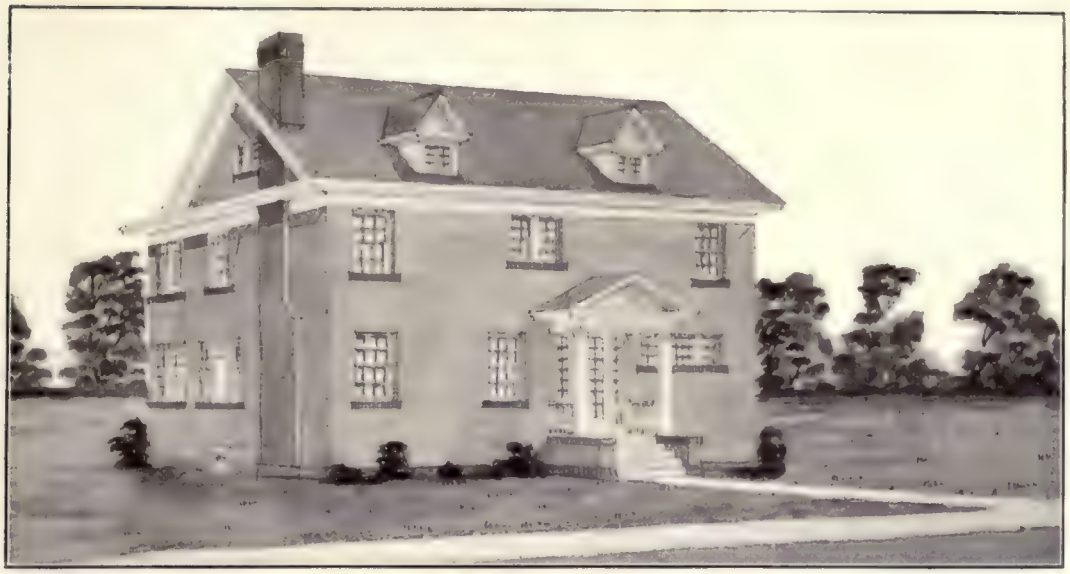


Many windows gives out-of-door living.—Chas. S. Sedgwick, Architect.

and the second story in white enamel. There are three good chambers and ample closets on the second floor, with bathroom; and good storage space in the attic which may be reached by stairs carried up over the main stairs.

The basement is full under the house, with ample space for heating apparatus, laundry, etc. The chimney is centrally located, with wide open fireplace in the living room.



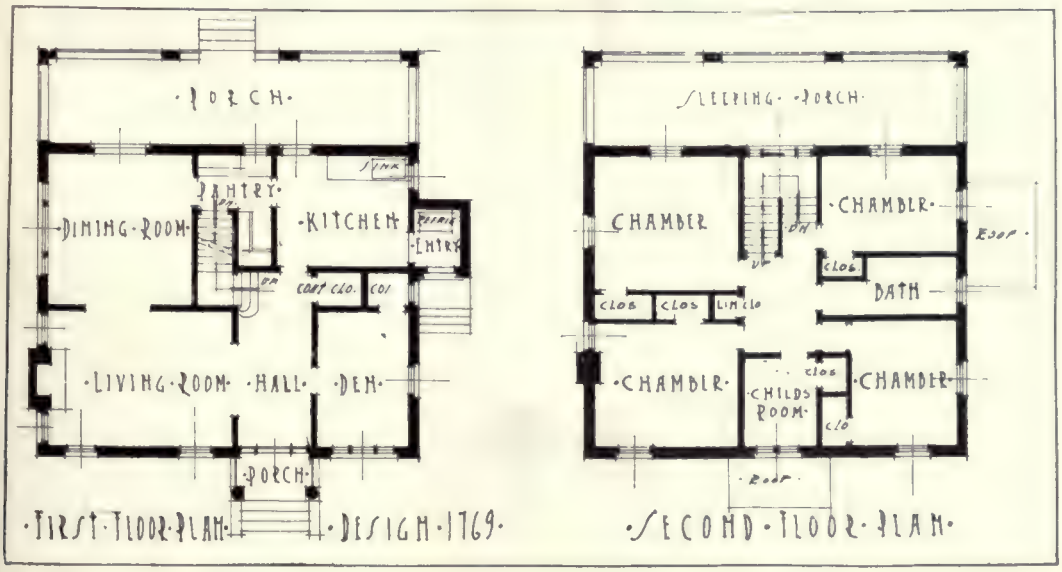


The whole house is simple and substantial.

A Roomy House

WE here illustrate another full two-story house of the colonial type, veneered with brick. The entrance is from a portico into a small hall with living room on one side and den on the other. The stairs are well placed, allowing an excellent communication between the kitchen, the stairs and the front door; a most necessary feature where the maid is expected to attend the door.

The dining room opens off the living



room and communicates with the screened porch at the rear, by French doors. The kitchen also opens on this porch, giving it convenient service as a dining porch.

On the second floor are four chambers, child's room and bath, with good closets in all rooms, and a long sleeping porch. There is good attic space even for old fashioned requirements, where heirlooms may accumulate.

The finish of the house is simple and may have inexpensive treatment, with hardwood floors throughout.

There is a full basement under the whole house, including the rear porch, so that the porch may be made a living part of the house in winter as well as summer. With hot water heat it can easily be made comfortable even in severe weather.

Homes of Individuality

Selected by W. J. Keith, Architect

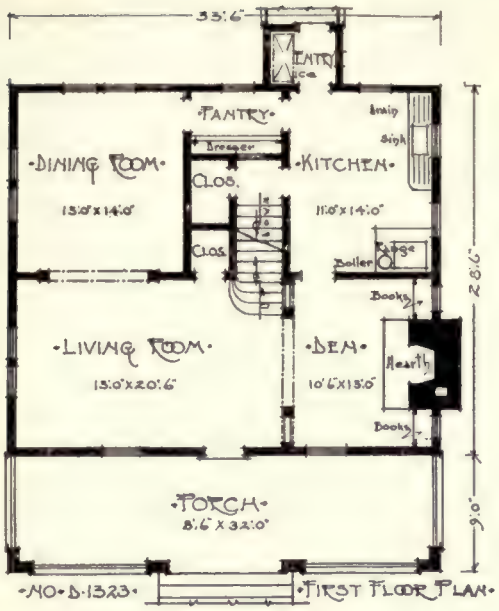


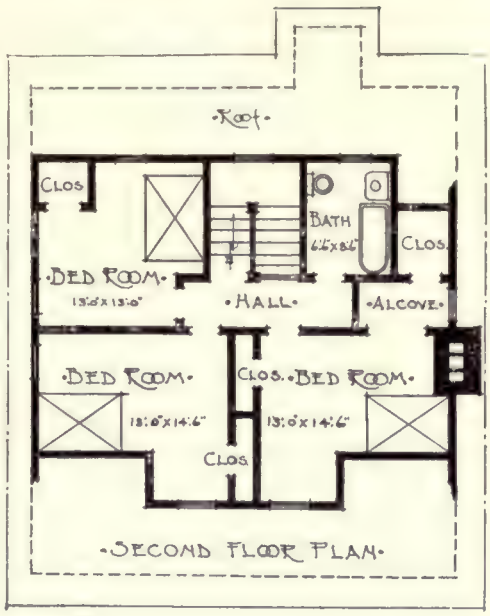
Shingle walls give a soft color effect.

A Good Summer Cottage

HERE is shown an attractive example of simplicity and good proportion. The walls and gable ends as well as roof and dormers are all covered with shingles. The floor plan is given below.

A living room and den separated by a post and panel treatment occupy the front of the house. The den is furnished with a stone fireplace and bookcases built in on either side. At the rear of the living room is a pleasant dining room. This connects with the kitchen through a pantry. The cellar stairs open from the kitchen, where is also located a large closet for storage purposes. The kitchen range connects with fireplace chimney by way of a flue passing through an enclosed portion at the top of the near bookcase. The cor-





responding section in the case on the opposite side of the fireplace is arranged as a cupboard for magazines. Service way is had from the kitchen into the den through a door at the side. A closet is built in at the left of the stairs for coats and wraps.

On the second floor are three bedrooms and bath. Closets are arranged for each room. A full basement is provided under the entire house.

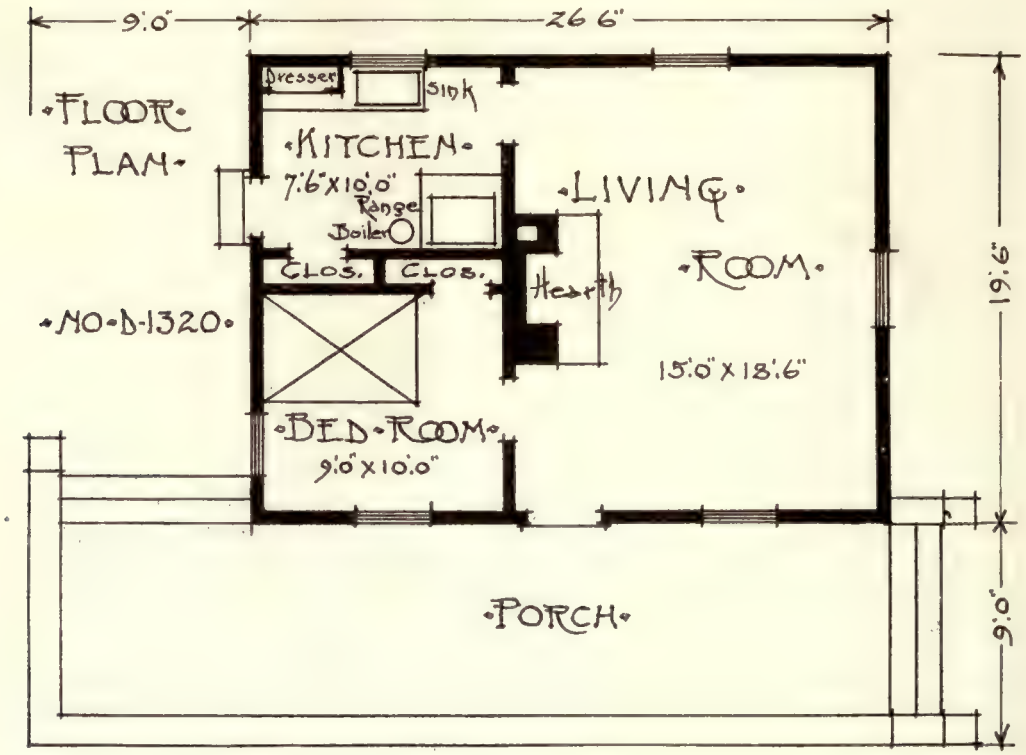
A Tiny Bungalow

A tiny house always has a particular attraction to people who practice or believe in the "simple life." Here is a plan in which the elements of



Field stones builds it into the hillside.

comfort have been reduced to their simplest form. This bungalow was built on a hillside and native stone has been used for the terrace wall enclosing the porch, giving an effective approach. The inside is attractive and livable, though very compact; a large living room with windows on three sides and a wide fireplace; a sleeping room with a closet; and a kitchen with sink, cupboard and a closet. The fireplace carries also the flue from the kitchen range. With its hospitable porch it gives the essentials of living.



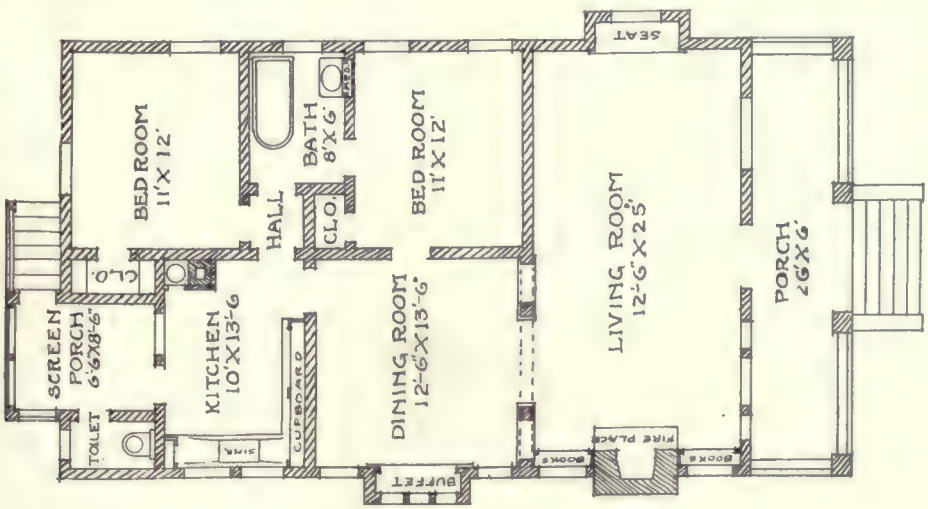
A Snug Little Bungalow Home

THE bungalow style of architecture is so comparatively modern that to call one "old fashioned" would seem a strange expression, still the exterior of this house, suggestive of the New England cottages, is surely old fashioned, although its inside arrangement is as convenient and cozy as any of the newer bungalows, and includes many of the built-in features which are such a help to easy home-making, even to a dust chute, which does away with all back-breaking over a dust pan. The house was designed for a narrow lot, being only 26 feet wide. The rooms are large and well arranged for easy housekeeping; there is a wide open fireplace in the living room and a cozy window seat. A colonnade opening with built-in bookcases in the buttresses on either side leads into the dining room, which has a built-in buffet. A complete



It is comfortable in Florida, Oregon and Michigan.—Bungalowcraft Co., Architects.

cabinet kitchen, good closets, handy bathroom and a screened porch make a home which has been built, it is stated, for $1,350 in Florida, $1,500 in Oregon, and with cellar and furnace in Michigan for $1,900. The kitchen chimney is so placed that when required a stove may be used in the rear bedroom. The interior is finished with hardwall plaster, tinted. The woodwork trim is of pine stained and varnished in all rooms except the kitchen, where it is painted. The picture shows the exterior so clearly that no description is necessary.





With good lines, it fits into the landscape.

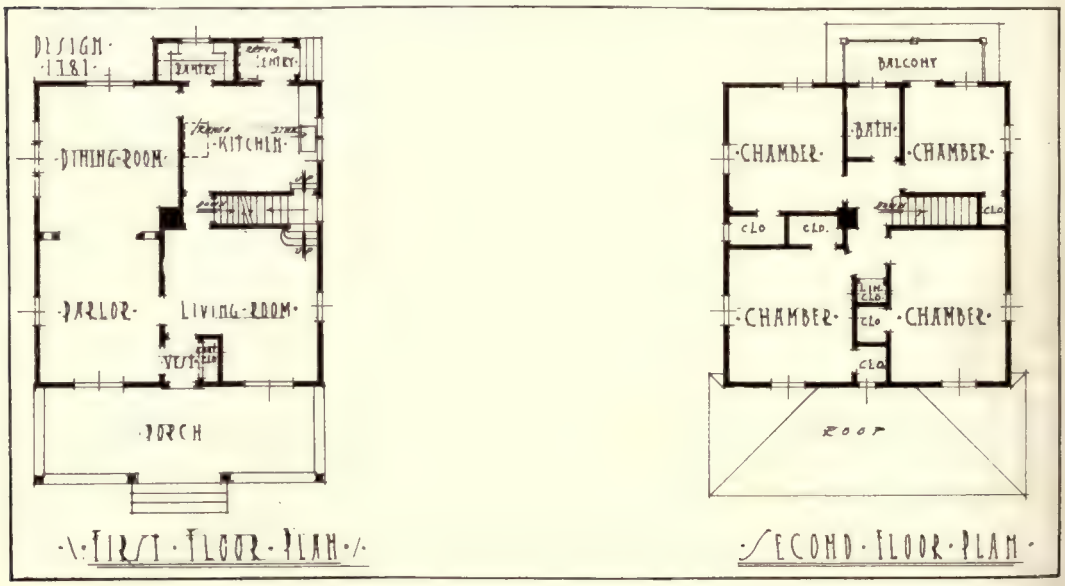
A Substantial House

IN this design we have the simple hip roof treatment with a construction of cement, plaster and shingles for the exterior walls.

The interior as well as exterior are so arranged as to give the most room for the least cost. With four rooms on the first floor, four chambers and a bath on the second, there is no waste space.

The windows come up under the eaves leaving a good air space under the roof, with windows or louvres in roof for ventilation. The balcony on the second floor, opening from a rear chamber, gives good opportunity for sunning bedding.

The interior woodwork may be either pine or fir, with brick or maple floors. It may be simply finished, yet be substantial and satisfactory. The house is planned to be heated by hot air



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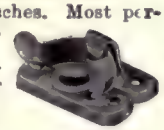
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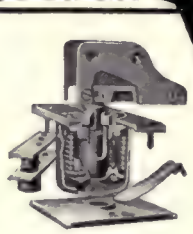
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Wall Paper Suggestions.

THE variety of wall papers is almost infinite, and at every turn one is apt to come across something which seems absolutely new and absolutely lovely. The question as to its use is usually one of adaptation. Nothing so makes a room as the right wall paper, nothing so kills it as the wrong one.

Certain things in the way of papers are almost always safe. It is difficult to go astray with a small pattern in two low tones of a color, soft green, gray blue, medium olive, or golden brown. Another wall which is almost always at its best is one covered with a verdure tapestry in low tones of olive, blue and russet. And, to realize how satisfying a paper with a handsome pattern in tones of grayish tan can be, you should see the same color in brocade with white woodwork. Of course, papers no more positive in character than those I have mentioned must be used with due regard to the contents of the room. Red velvet curtains would be quite unhappy in association with the tapestry paper, nor would you care for the combination of gray blue walls with turquoise furniture coverings, or purple silk cushions. But within their limitations almost any one can have an effective room with one of the papers I have mentioned.

There is another type of paper, which, for lack of a better name, I will call the picture paper. The landscape papers which were the pride of some of our great colonial houses belong to this class; so do the gorgeous or delicate groupings of birds and foliage upon black or white ground, made from designs by distinguished artists, and, but for the brushwork, having all the charm and pictorial quality of a fine watercolor. Others, not less interesting, copy closely Jacobean crewel work or Georgian damasks. At first blush such papers seem utterly impossible for the average house, admirable decorations for shop windows but quite impracticable.

William Morris held that it was perfectly proper to use a large patterned paper on a small room, and certainly the repeats of all his best papers and tapestries are a long way apart, although they are so well managed that one is not conscious of the structure of the design or of its size. But Morris' walls were no backgrounds, they were decorations, as much as a mural painting. So if you want to use such papers you can use them as he used his large patterned papers and textiles, and consider your wall complete when the paper is laid, not attempting to hang pictures or to have any other sort of ornament. And, as we are so accustomed to the use of pictures that we should probably feel quite unhappy in rooms without any, you are well advised in choosing for experiment the one room in which you do not live, but through which you pass constantly, the hall.

The use of such a paper solves the problem of the insignificant hall, so common in our American houses, built on lots of limited frontage. The wall space is usually small so that the outlay for a really fine paper will be slight. Select for your narrow and poorly lighted hall a bird and tree pattern of light and bright coloring on a white ground. If the hall has a northern exposure choose a paper with warm tones of color, yellow greens, yellowish pinks and reds, the sort of paper whose birds are macaws or parakeets,

or parrots. Then have the woodwork either white or a soft olive, the carpet a plain one in olive of the tone of the foliage. Except a possible mirror, nothing is needed but the indispensable furniture, a table and a chair, with hooks under the staircase for hats and coats.

For the sunny hall, on the other hand, a good choice is the peacock paper, which is easily found, and has besides the beautiful iridescent blues and greens of the birds, foliage in cool tones of green, which will contrast agreeably with a plain blue carpet for floor and stairs. While the first treatment suggested looks extremely well with dark oak furniture, whose tone might be extended to the woodwork, the second is equally good with mahogany for chair, table and stair rail.

There are some other large patterned papers, which copy Georgian damasks, the design worked out in soft blue or dark rose on a biscuit ground, or vice versa, the texture of the fabric being cleverly reproduced. A paper of this sort is well bestowed above a dark oak wainscot in a hall, or if it is carried down to the surbase it makes an effective background for dark oak furniture, especially the rose colored paper. The papers which copy crewel embroidery are specially good for halls with Jacobean furniture in dark oak. It is sometimes possible to find the same pattern in paper and in printed linen, and if this can be done the linen can be used to good effect for loose cushions for chairs and a settle. But it may be well to say that most of the Jacobean furniture is not adapted to small apartments.

Harmonizing the Other Rooms.

It may seem as if the use of a paper with so much pattern were inconsistent with the single color scheme which is so much the best for the small house. While it is possible that the rooms may lose slightly in apparent size, the introduction of a contrasting scheme relieves what is often felt to be the monotony of a floor in a single neutral color. The hall can be considered the high light of the scheme, the other rooms being carried out in the lower tones of the "picture paper." For instance, the rose red and biscuit paper would be effective in a house whose other rooms were in tones of grayish brown. The same sort of a paper in blue with a warm brown for the woodwork would



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be good with a general golden brown scheme. As for the bird and foliage papers, the warmer sort of coloring would answer admirably in a general green treatment, while the peacock pattern could be used with living rooms decorated and furnished in blue. It is obvious that the difficulty of harmonizing the various rooms with a highly decorative treatment of the hall does not exist in a house of the strictly colonial type, in which each room is to a certain extent isolated, independent of the others, and seen from outside only through a narrow opening.

The same principle applies to the use of these decorative papers in bedrooms, whose doors are presumably kept shut. There is a great deal to be said for the pictorial treatment of bedroom walls. In the average house there are not enough good pictures to go round, and the rubbishy ones are kept for the bedrooms. Far better sell them, or put them away, and have cheerfully flowered and unbroken walls, against which your furniture will be pleasantly relieved, and upon which your eyes will rest with satisfaction as it is lighted by the early sunshine. The papers which I have mentioned as copying old crewel work are particularly happy in rooms with Jacobean furniture. The curtains and furnishings should be of plain color.

Jacobean Styles in Furniture.

It is only two or three years since our manufacturers began to copy the Jacobean styles of furniture, and their first pieces were of the most pretentious order, fitted rather for the hall of a castle than for simple American houses. Now it is possible to get a great variety of pieces of manageable size and fairly moderate price. Such furniture is a capital investment, as it is excellent in design and construction and really beautiful in color.

What may be considered the typical piece is the gate-legged table. The large size being an admirable dining table for a small family, while the smaller ones are useful in many ways, especially those with a drop leaf. To go with the tables are dining chairs with square seats and backs, which are most effectively upholstered in dull red with a heavy wool damask, far more serviceable and picturesque than the usual leather. Other chairs have panels of cane, still others rush seats. Quite the prettiest wooden bedsteads to be had are Jacobean, with twisted posts, head and footboard of nearly equal height, and inserted panels of cane.

All sorts of small articles are made along Jacobean lines although not copies of old pieces, among them small desks and nested tables, fender stools and jardinieres. All the Jacobean furniture looks particularly well in association with large patterned cretonnes or printed linens, or with the verdure tapestries. For a bedroom a dull blue wall, strongly patterned blue and cream printed linen and Jacobean, cane paneled furniture is a very happy combination.

The Office of Lamp Shades.

Too often the whole effect of a room is spoiled when it is seen by artificial light, and electricity sins greatly in this respect. Very gradually we are learning to appreciate the value of side lighting with here and there a stationary lamp on table or desk.

Instead of buying expensive glass shades for these last use paper of fabric shades harmonizing with the furnishings. Have you a cretonne covered davenport loaded with cushions? Duplicate the material for big shades for your lamps. If the effect of the material with the light shining through it is not good try a lining of thin silk, white, rose or yellow, or else cover the frame, beneath the cretonne, with heavy white net.

When pottery or porcelain jars are used for lamps the shade should be of silk, repeating same color of the design. If the vase is pottery an opaque shade covered with Japanese grass cloth of the same color is effective. Or the geisha shades of paper and bamboo can be used. These are especially good in orange tones and nothing looks better with light colored Chinese or Japanese porcelain vases than a white geisha shade.

There is no greater mistake than to have a jumble of different colored shades. If you have half a dozen in a room, let them be of varying tones of a single color with possibly a single one of a neutral tone. If vou have several shades covered with the same figured material, chintz or silk, vary the shapes and the depth of tone of the linings. Any good needlewoman can make such a shade over a wire frame at a very small cost.



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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A Query from Massachusetts With Old Furniture As a Key.

Mrs. W. G. W.—"I am about to build a home on Colonial lines, facing the east. All interior wood finish in cypress and floors hard pine. Living room will be 15x22 running from east to west along south side; hall central; dining room east and north windows. On the second floor there are three bedrooms, bath and sitting room, on the southeast corner.

"I am in despair about my old furniture, and cannot have new at present except the most necessary. Can you please help me?

"I have the contents of two small living rooms at present. Old square rosewood piano, two mahogany and tapestry rockers, a straight birch chair, and a brown Bar Harbor wicker with tapestry cushions, and a mahogany Victrola. Rug 9x12 is Hartford saxony in pastel tints, cream, tan, faded rose and some yellow. I have also a large leather davenport in Early English, writing table and two rockers to watch. One green and tan Axminster rug 9x12 (used with the Early English furniture).

"My dining room has tan and green tapestry rug 9x12, old sideboard that I intend having made into buffet, square table and chairs all in light oak.

"I wanted my living room floor and woodwork in the new driftwood color and finish, walls a gray green, with border in wild rose, or some pale rose stencilling. Dining room walls above chair rail in buff or warm tan, below in sage green and woodwork in one of the brown tones.

"What shall I do with dining room furniture, and would some rose be better in this northeast room? I consider using only alabastine tinted walls all over the house, except bathroom, kitchen and pantry, which will have painted walls.

"Is it possible to have the driftwood finish in living room with this mixed furniture, or what shall I do with it? What can I do with hopelessly ugly bedroom furniture, neither ancient nor modern, but of the clumsy period of 30 years ago, including a black walnut set with marble top?

"I am sending for Keith's Volume 9 on Interior Decoration; perhaps it will answer some of my questions. But I would like you to tell me about painting over some of this old furniture, if it is not hopeless."

Ans.—We have given your problems our best attention. No, you cannot carry out your dream of driftwood finish and wild roses in living room. Neither walls nor the light pastel coloring of the Saxony rug would be at all in tune with the mixed furniture you describe. But it would be possible to use these ideas in the dining room and have it very charming. Do the woodwork in the driftwood, grey stain; have the plaster wall below the chair rail a rough finish and tint it a dark dull rose. Finish the wall above to moulding at top of doors and windows, hard putty coat plaster and use a wall paper here in an all over tapestry design of dull pink roses and greyish green foliage. We have seen exactly the thing, also a cretonne in similar coloring, half a width on each side over white, to use at windows. The Saxony rug must be used with this scheme, though it is rather light for a dining room. We would like it dyed the deep dull rose of the plaster dado. Now then remove the varnish from your light oak dining set and stain it a little darker grey than the driftwood woodwork. Tint the ceiling ivory white.

The woodwork of hall and living room should be the same and we advise a brown stain. Tint the walls a soft ecru, not tan,

nor grey, but between the two. Use the green and tan Axminster rug here and supplement with a couple of long narrow ones, one each side in plain green. One width of plain Wilton or Axminster carpet finished like a rug at the ends, each three yards long, would be a good and inexpensive way of doing this. Then use plain green as much as possible on the furniture putting the mahogany pieces at one end of the room and the davenport in front of the fireplace.

The black walnut bedroom furniture is not hopeless if you take off the marble tops and replace with glass cut to fit, over gay cretonne. Use the same cretonne freely in furnishings but not on the bed, and tint the walls a soft putty grey with one of the sand color rugs, white ceiling and white woodwork. Give the golden oak furniture a setting of tans and soft leaf browns. Use the blue rug with the white bed and tint the wall a soft old blue.

Color Scheme for Living and Dining Rooms.

L. L. W.—"Enclosed is the first floor plan of our new house. Will you kindly suggest a color scheme for the hall, dining room and living room? The floors are oak. Shall they be waxed or varnished?

"The woodwork is to be white enamel. How shall I finish the walls? What kind of curtains, portieres, rugs and furniture shall I get?"

Ans.—Although your living room has only direct lighting from the bay window on the north, it receives so much indirect light through wide openings on all sides, that we may venture to use a warm putty, grey wall. There is a paper with the effect of grass cloth in shades of grey lighted up with a thread of gold, that would be beautiful with the white woodwork and white ceiling.

There is a tapestry paper in grey with broad figured stripe in mulberry coloring that would be fine in the hall. With these walls we would use mulberry hangings and grey and mulberry rug in living room. Soft deep rose tones in oriental rug in hall.

Furniture of living room, wicker, stained grey and upholstered in mulberry velvet, except library table and desk in grey oak or ash.

Dining room wall plain grey dado, foliage paper above in dull greens and blues. Blue rug, blue curtains, furniture Kaizer grey oak, chair seats upholstered in blue leather. Ceiling pale grey. We should prefer floors waxed. Walls should be hard finished for paper, sand finished for tints. All ceilings should be tinted.

Furnishing a New Bungalow.

Mrs. C. L. E.—"As a constant reader and former subscriber to 'Keith's' I now turn to you for advice as we are building a bungalow. I am enclosing rough sketch of same. The small front bedroom is for our small children and I want that in grey and pink. Grey enamel chest of drawers and grey iron bed, cretonne in bright pink flowers on grey ground and pink walls. Will that be correct? We are refinishing the chest of drawers ourselves. Should we get other pieces for this room besides chairs and perhaps a small table?

"Then my kitchen and bath I should like in blue. Bath has south window and kitchen will get plenty of sunlight through breakfast nook I think, which is almost all windows.

"Furniture for other bedroom and living room is fumed oak of good make. Brass bed, chiffonier, and dressing table for bedroom. Piano (also in fumed), and three rockers for living room.

"I think I prefer round dining table for living room but my husband thinks a very large library table better. We must have one that would answer purpose of dining also.

"I do not care for neutral tans or even golden browns with fumed oak, and have wanted to have living and dining room in the blues and greens you so often advise, but know that is out of the question with the northwest facing.

"I am so anxious to have everything in good taste even though it is such a little place, and I want things to have an individuality even to minute details.

"Can one purchase craftsman canvas or linen wide enough for bed spreads?"

Ans.—The combination living and dining room appears to be your chief problem. In the March, 1915, issue of Keith's, on pages 188-190, many suggestions are given for such a room which we are sure will be of value to you. We think your idea of the round table is best as it would

be almost impossible to use a library table for eating. The round table need not be a regulation dining table; it could be a drop leaf table and be very pretty with a mat, flowers and books when not in use. One of the circular wicker tables stained brown, would be pretty there and a wicker couch to match along the group of windows. The wicker table should have a glass top over cretonne and the couch be cushioned with cretonne. When you wanted to seat a number of people you could have one of the circular pine wood table tops that cost $2.50, to set right over the wicker top, any size you please.

Your ideas about the children's room are all right, and very pretty. The small table and low chairs will be sufficient additional furniture. If you want a blue and white kitchen, a good way is to have a 4-foot dado of the wall, marked off like tile in hard plaster, then paint it in oil paint a dull Delft blue. Above this paint the wall and ceiling cream white.

Craftsman crash or linen comes about 50" wide. Why not use heavy half-bleached sheeting, double width? There are so many windows in your living room that the blue and green combination might be managed. We have seen a blue and green Saxony rug with lines of old gold through it. You do not say, however, how you plan the walls. It would not do to have a solid *tint*, either blue or green, but there are tapestry papers with soft blues and greens on a light putty grey ground that would not be too dark. However, there is a soft *ecru* tone, neither a tan nor a brown, that would make a good plain wall. Then get your blue and green in the rug and in the cretonne for seat cushions, table top, couch, etc.

Dedication for a Fireplace.

"Tibi plendet Focus."

This hearth was built for thy delight,
For thee the logs were sawn,
For thee the largest chair at night
Is to the chimney drawn.

For thee, dear lass, the match was lit
To yield the golden blaze;
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—C. D. M., in *New York Sun.*

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Housekeeping by Electricity

FOR a number of years, electrical devices in household economics have been appearing on the market which have made a strong appeal to the housewife. The electric iron, the electric toaster, the vacuum cleaner which may be operated by a simple electrical connection already installed have become indispensable.

Probably few householders realize how many such electric appliances are now available.

The "Home Electrical," one of the exhibits in the Palace of Manufacturers at the Panama Pacific Exposition at San Francisco, demonstrates the extent to which electricity is readily adaptable for all kinds of domestic service.

A bungalow has been built for the installation of this exhibit, with exterior of gray stucco, and the roof of red tile. The interior consists of a living room, dining room with breakfast alcove, bedroom, nursery, sewing room, bath, kitchen, refrigerator room and laundry. There are also an electric garage, a workshop and a small creamery. The home is completely furnished and attractively decorated.

In the living room is an electric "fireplace" of the luminous radiator type. An electric piano player will entertain visitors either with classical or popular selections.



Breakfast is prepared at the table.

The dining room is heated by electricity, as are all of the rooms, and the air is kept in motion by a small electric fan. Here are devices for the preparation of lunches or serving light refreshments; a radiant toaster, an electric coffee pot, a tea samovar, a disc stove for general cooking, a unit-set, a chafing dish for preparing hot soups or desserts and an electric grill for broiling, toasting, preparing eggs, etc. If desired, a very substantial meal can be cooked on the

dining room table. Another electric feature is the warming closet at the entrance to the butler's pantry.

To the right of the dining room is the breakfast alcove, very cosily arranged and also equipped for "table-cooking." It looks out upon a vine-covered patio with ferns and flowers and a tiny spring.

Between the dining room and the kitchen is the butler's pantry. In it is installed a combination butler's sink and dish-washer for cleaning the light and valued wares. On a shelf there is a disc stove for making dressings and sauces, and a small electrically driven buffer for polishing nickel and silver pieces.

In the kitchen, the workshop of every home, an electric range, equipped with hot plates, broiler and ovens, is ready to cook the largest family dinner. A constant supply of hot water is obtained from an electric water heater attached to the usual kitchen water tank. A household ozonator and exhaust fan combine to remove unpleasant odors. A new device, which does away with dirty and impure ice, is the electrically lighted and cooled refrigerator, where small cubes of ice also may be obtained.

The bedroom contains many electrical conveniences and articles for the toilet, including an electric massage vibrator, electric curling iron, hair dryer and boudoir lamps. There is an electric heating pad and a small electric water heater in case of sickness. The bedroom is heated by electricity in chilly weather and cooled with an electric fan when the nights are too warm. There is a connection for the vacuum cleaner. Most interesting of all the electrical appliances in the bedroom is the burglar switch, which, when needed, lights every lamp in the house.

Near the bedroom is the nursery with its electric toys and an electric device at the window to keep the room supplied with fresh air without dangerous drafts. The nursery is heated by electricity and there is an electric nursery outfit for preparing medicine, food, etc., in case of sickness.

The bathroom is finished in white tile and porcelain. Here are such electrical conveniences as a hot water cup for shaving, and a glowing electric radiator.

The sewing room is replete with electric appliances for sewing, mending and dressmaking. The sewing machine is operated by an electric motor controlled by the foot



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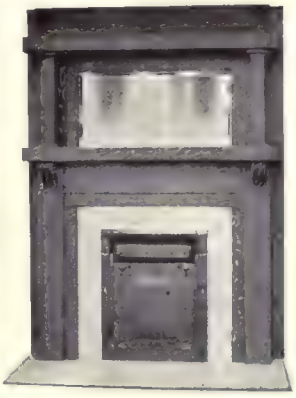
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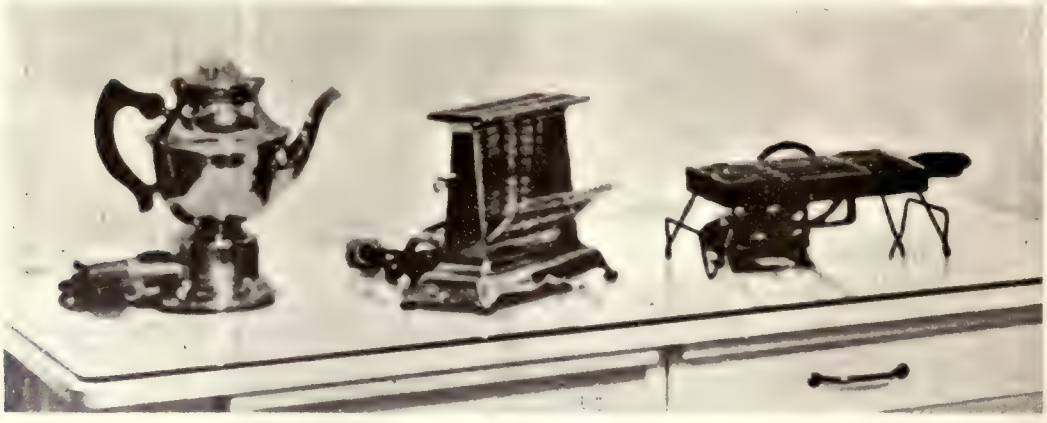
The home is equipped with a complete electrical laundry. There is a quiet-running washing machine and an electric mangle, which may be entrusted with delicate pieces; three, six, eight and twelve-pound irons for ironing and pressing, and a double eight-inch hot plate for boiling clothes. A collapsible ironing board folds into a shallow closet, and the flat iron switch is equipped with a pilot light to indicate whether or not the current has been turned off. An air heater and exhaust fan provide comfortable working temperatures.

Provision has been made, in the shed, for constant water pressure all over the house when the water supply is a well or spring. Here is installed an automatic air-pressure system. The pump is driven by a small electric motor, controlled by a pressure switch.

Nearly every home has a workshop where the-man-of-the-house builds and repairs, especially in country places. The shop is equipped with a work bench, bench-type drill press, clipping hammer, electric riveter and grindstone. Then there is a buffing outfit, saw table, bench type lathe and metal melting pot, all electrically operated. Handy little electric soldering irons and an electric glue-pot aid in repairing leaky utensils or broken woodwork. An air heater provides comfort.

In the garage is a light electric coupe, which is kept charged automatically by a mercury-arc rectifier. The lighting batteries are charged by a small vibrator. A small portable search lamp, which can be operated on any electrically lighted car, is used for close examination of any part of the car, and a portable electric tire pump completes the car equipment. Connections are made to the interhouse phone in both the garage and workshop. An air heater is also installed in the garage.

Of particular interest to the visitor from rural communities is the dairy. This is equipped with an electrically-driven cream separator, bottle washer, and churn. In conjunction with these appliances is an automatic refrigerator and milk cooler, operated by a thermostat to keep the temperature of the cooling chamber at the proper point.



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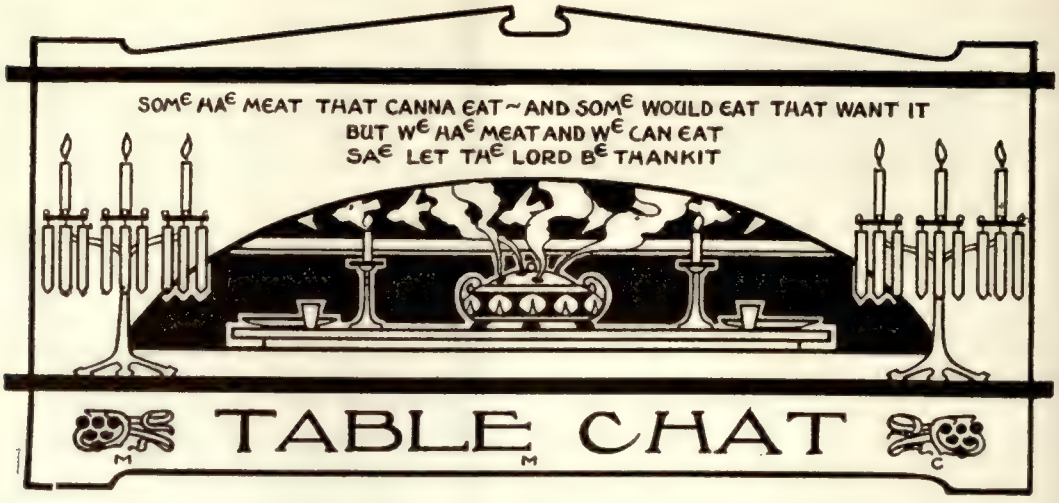
Easy to apply. No soldering, no special tools—any ordinary mechanic can apply it. Interlocking system by which tiles dovetail into each other makes the roof absolutely water tight and provides for expansion and contraction perfectly—summer and winter. It is guaranteed non-breakable.

HOME-BUILDERS—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new book on beautifying the modern American home by use of **Metal Spanish Tile** is yours for the asking. A postal will bring it. Address

The Edwards Manufacturing Co.

The World's Largest Makers of Metal Ceilings, Metal Shingles, Steel Roofing, Siding, etc.

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The Value of Accessories

I DO not think we always realize the value, as far as the effect of our tables goes, of the smaller things, little silver accessories, glass with a touch of individuality, a clôth a little out of the common. Note in the illustration shown the delicately etched water glasses, the quaintly shaped pepper boxes, the round bouillon spoons, the little silver baskets for olives and almonds, the lace cloth exactly fitted to the table, and the general effect of dainty perfection.

While it is delightful to have all these things in solid silver, there is nowadays a really wide choice of plated ware of good design and of indefinite wearing possibilities. The best of these things are as nearly plain as possible, the only ornament a beaded edge or a simple fluting. Particularly good are the tea services which are made in old Queen Anne de-



The accessories are good.

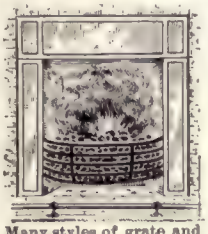
Gain Comfort, Secure Health and Economize Heating Expense

by warming your home with our open grate fire that does *More* than look bright and warms *More* than one room.

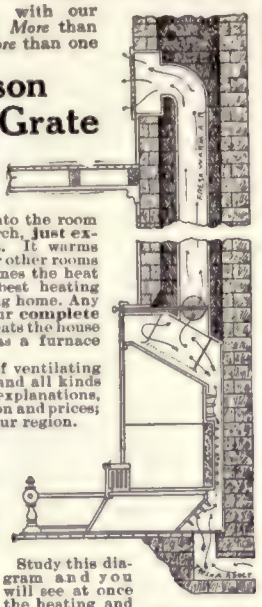
The Jackson Ventilating Grate

does all these things, and **More.** It draws in fresh air from outside, warms it by circulating it around the fire in a warming chamber and then pours it out into the room thru the register over the arch, **just exactly as a furnace does.** It warms several connecting rooms, or other rooms upstairs, furnishing four times the heat from the same fuel. The best heating investment for a cheer-loving home. Any mason can set it up from our **complete plans furnished Free.** Heats the house in Fall or Spring as well as a furnace with about half the fuel.

Send for Free Catalog of ventilating grates, mantels, andirons, and all kinds of fireplace fixtures, with explanations, illustrations, full information and prices; also reference to users in your region.

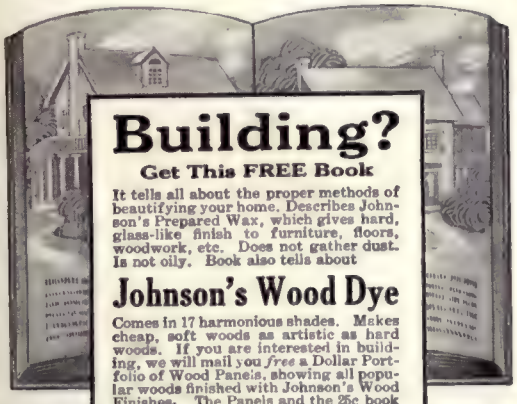


Many styles of grate and Mantels to choose from.



Study this diagram and you will see at once the heating and ventilating principle that makes this grate superior to all others.

EDWIN A. JACKSON & BRO.
M'f'rs, 25 Beekman St., New York



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Get This FREE Book

It tells all about the proper methods of beautifying your home. Describes Johnson's Prepared Wax, which gives hard, glass-like finish to furniture, floors, woodwork, etc. Does not gather dust. Is not oily. Book also tells about

Johnson's Wood Dye

Comes in 17 harmonious shades. Makes cheap, soft woods as artistic as hard woods. If you are interested in building, we will mail you *free* a Dollar Portfolio of Wood Panels, showing all popular woods finished with Johnson's Wood Finishes. The Panels and the 25c book Edition KE, are *Free* and *Postpaid.*

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The Bungalowcraft Co., 507 Chamber of Commerce, Los Angeles, Cal.

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Stucco walls must be enduring *clear through* or the stucco will crack and fall off. That is why

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is the most economical base for stucco or interior plaster that you can use.

Plaster grips "Kno-Burn" like fingers. It will never come off. "Kno-Burn" will not rot because it is a *metal* lath. The *first cost* of "Kno-Burn" is only a trifle higher than the cheapest types of wall base.

"Practical Homebuilding" tells you *all* about walls. More, it tells you all about building in general. It is full of photographs, floor plans, genuine information.

Send ten cents to cover cost of mailing and ask for booklet 659

NorthWestern Expanded Metal Company

965 Old Colony Building **CHICAGO, ILL.**



signs, with fluted bodies and plain tops, and handles of black wood. If one is prejudiced in favor of an earthen tea pot the silver one can be used for hot water. Fifteen dollars will buy a really artistic plated tea service of this sort.

Why not set up a "Savings Box for Silver," into which from time to time a few pennies might be dropped to be exchanged later for something really desirable?

Concerning Lace Cloths.

For people who entertain a lace cloth is a really valuable asset, as it does not get demoralized like a damask one, can be used many times and is not nearly as fussy as the usual combination of linen center and plate and tumbler doilies.

One of the objections to the Renaissance lace, which was so popular a few years ago, and which is illustrated, is that it had a way of stretching out of shape when it was washed. This can be obviated in one of two ways. Either the braid can be sewed to a foundation of not too fine net, filet by choice, before the lace stitches are worked, or instead of the rather sketchy stitches in common use the braid outlines can be filled in with straight buttonholed bars, as is done with cut work. With either method the effect is good and the work will keep in shape with ordinary care.

An extremely pretty adjunct to the tea tray is a fitted cover for it, either of lace or of fine linen with white embroidery. If the latter is used the initials of the housewife should be embroidered at the middle of one side. Any piece of linen gains greatly if it is accurately fitted to the article which it is intended to cover.

The Indispensable Tea Cosey.

The tea cosey is as essential to English housekeeping as the tea pot, and is often extremely ornamental, of handsome brocade heavily embroidered in silk. Sometimes the cosey is plainly covered with silk or satin and is fitted with a detachable cover of embroidered linen or lace, which can be removed when it becomes soiled.

With ourselves the tea habit is not so general, and the cosey is conspicuously absent, but it serves a useful purpose at the piazza supper. It may be of any of a number of shapes, the best being a half oval. Another sort is much like a bishop's mitre, being made of four sections curving to a point at the top, the seams defined with a cord. The cosey should be large enough to cover the teapot easily, and be generously wadded, or else filled with down, and the lining should be of thin silk matching the outside.

In color it should either harmonize with the china, or be of the same general color as the dining room walls. A very serviceable cosey can be made of velveteen, olive, gray blue, or rose red, embroidered with a single large initial, in crewels heavily padded.

The Latest Fashion in Desserts.

If you wish to be very elegant, instead of the traditional pie or pudding, you will serve a dainty assortment of French pastries, each different to the other arranged in a silver basket or on a plate with a folded napkin. They are passed by the maid, and each guest helps himself to the cake of his fancy with the aid of a broad-bladed silver knife. All sorts of dainties are included, tiny pastry shells filled with fruit in a thick syrup, almost like a jelly, thin layers of pastry separated by whipped cream, little eclairs, chocolate or vanilla, round pound cakes covered with mocha frosting, macaroons and lady fingers. For a formal meal these dainties are far less trouble than anything made at home and if sufficiently varied are sure to be appreciated.

Eggs in Potato Shells.

There are here and there people who cling to the habit of having potatoes for breakfast. To them may be commended a rather unusual dish. The potatoes, which should be large and of uniform size, are baked, the tops cut off and the center scooped out, leaving a wall about half an inch thick. Into the cavity are put a few bread crumbs, a lump of butter, a broken egg, a dash of pepper and salt, more bread crumbs and more butter. Each potato is set into one of the sections of a muffin pan and they are baked until the eggs are set.

Another breakfast dish consists of thin slices of broiled ham served with potatoes Philippa and hot corn bread. The potatoes are boiled, chilled and cut into dice with half their bulk of white turnips. A white sauce is made with a tablespoonful of flour and one of butter and a cup of cream, in which the potatoes are heated.



Comfort Insurance

We insure you comfort in that new Home.

There is no producer of comfort that excels the Hess Furnace System of Heating.

The method of installing it, which we plan in every detail, *insures proper temperatures* in every room, and thorough and complete circulation of the warm air.

The size of furnace we select *insures economy* in fuel and ease in firing and regulating.

The addition of sufficient moisture *insures a healthful and agreeable condition* of the atmosphere, quite unlike the effect from steam, hot water or ordinary hot air furnaces.

The construction of the Hess Steel Furnace, with every seam welded, *insures against leakage* of gas and dust, with their menace to health.

Our trial terms of sale, by which your own trusted banker holds the purchase price till next January, while you test the furnace, *insures you against loss*, and against errors on our part. We receive nor ask 1.0 pay till the heater proves equal to our guarantees.

Shall we *insure your comfort?*

New booklet just out on Furnace Heating. Ask for one.

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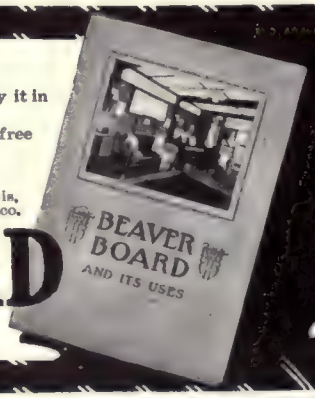
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Roof, light olive, sides, dark green. Architects, Freeburg & Fidler, Jamestown, N. Y.

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"Weatherbest" Shingles are made only from selected grade Red and White Cedar. They are stained **any** shade **you desire** with a stain which is not only lasting as to color, but on account of the wood-preserving material in it, the natural life of the shingle is greatly increased. Shingles come to the job all ready to put on; no brush coating necessary. Every shingle is stained from **tip to butt, not** merely part length and is equally done. Our scientific, thorough process and materials insure permanent satisfaction.

Ask us for Free packet sample Shingle Strips

showing colors on the natural wood, enabling you to pick out just the shades you want. Any shingle information gladly furnished.

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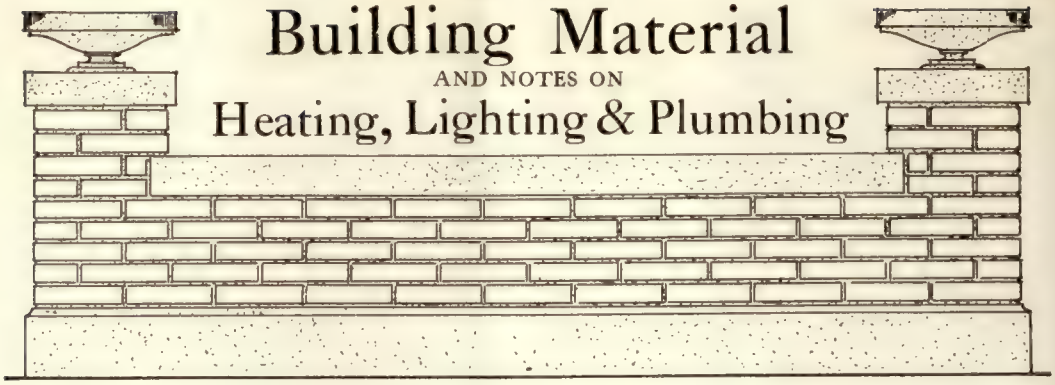
177 Main Street North Tonawanda, N. Y.

Makers also of the superior quality

"Transfer Brand" Red Cedar Shingles

Demanded by knowing builders, sold by best lumber dealers everywhere

The Publisher of Keith's Magazine backs up its advertisers.



To Avoid Dingy Stucco.

CRITICAL examination shows that stucco is a more or less porous material which, in smoky atmospheres, sometimes absorbs the soot-laden water with which it is brought into contact. During a rainy season considerable soot is carried into the pores and the color of the stucco becomes perceptibly darker. It has been found that this pore-filling process only lasts two or three years, however, at the end of which time the pores of the stucco were completely filled or clogged with the soot.

The natural action thus observed suggests a method for overcoming this difficulty. Fill the pores with a white or colorless waterproof substance before the natural process has had time in which to fill them with soot and dirt.

There are two ways by which this result may be accomplished. At the time the stucco is being mixed a small quantity of a reliable integral waterproofing should be added to the water used in the process of mixing. Only a small quantity need be used and the cost should not exceed 1½ cents per square foot, or about $35.00 for an ordinary eight-room residence. The integral paste or powder is carried into the pores and it is found that the stucco so treated is permanently waterproof and stainproof.

The second method is used to waterproof and stainproof after the completion of the building. It sometimes happens that the builder does not learn of the integral method until it is too late to use it, and in this case a colorless waterproofing method supplies the omission. It is a wonderfully simple process, inexpensive and practically as efficient as the integral method. The surface may be brushed with two coats of a colorless waterproofing, the liquid enters the pores and there deposits a clear, colorless, water-resistant substance which effectively protects it from rain and smoke.

To Dry Paint.

The method given below for drying paint under especially trying conditions, comes from Australia. It may be used on damp or green wood. In circumstances where paint ordinarily would not dry at all, or would dry only very slowly, drying may be made certain by the addition of a small quantity of lime. To half a pot of paint add a teaspoonful of lime. Take the dry lime and work it well into a small quantity of the paint with a putty knife. Then add this to the paint. The paint will then dry hard in a short time. The result obtained is much the same as that which follows the application of a coat of paint over a surface which has been previously limed. It is generally thought that when paint dries on a surface previously limed, it is because the lime has killed the grease. Evidently this is only half the explanation, because it is clear that the lime on the surface, mixing with the paint, has an effect similar to that following the use of a powerful drier.

A Reinforced Plaster Base.

The need of a greater protection against fire as well as the desirability of as great protection as possible against the weather is making itself felt in new building materials.

The reinforcement in concrete has revolutionized building methods. The idea of the reinforcement is being utilized in



No Matter

what the cost of first appearance, your satisfaction and your money's worth are *finally* measured by the Quality of the Fixtures that go into your bath room.

Send for a Wolff Bath Book

It will suggest arrangements and show appropriate fixtures for your home, fixtures of Wolff Quality and design, whether simple and expensive or elaborate.

60 years' experience in manufacturing every item of a complete plumbing equipment is back of every Wolff design.

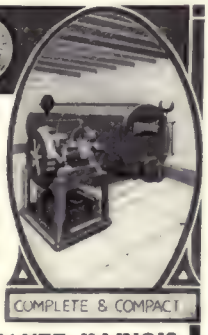
Regardless of the price asked, every fixture from the Wolff factory has received the same careful supervision in its making, and shows the same high quality of material and workmanship that has placed Wolff plumbing, complete, in thousands of residences from Coast to Coast.

L. WOLFF MANUFACTURING CO.

Pottery, Trenton, N. J. **601-627 West Lake Street, CHICAGO, ILL.**



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The largest or smallest residence, no matter where located, can be equipped with all the comforts of the city home. The Kewanee is the original air pressure water system, supplying water under strong pressure for bathroom, kitchen, laundry, garden, garage, barns and stock. Excellent fire protection. No elevated tanks. Anybody can operate. The Kewanee is built as a complete and compact system in our factory and ready for a life-time of good service as soon as the shipping crate is taken off. Cost from $45.00 up, according to capacity desired. Our dealers are high class mechanics and will install a Kewanee System, with our guarantee of success. KEWANEE PRIVATE UTILITIES give daily service and remove the last objections to comfortable country living.

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The Proper Way to Hang a Screen



is with the ***Watrous Combination Screen Hanger*** or ***Hinge No. 17.*** It is the easiest of all to put on or remove. Cannot be misset. Used as a hinge it allows screen to be swung out so that windows can be easily washed, and the awning cords are accessible.

Once used no housekeeper will ever be satisfied with screens put up any other way. Will hang a full length screen either from top or side, or a half length screen from the side.

No tearing out of stops and pulling nails or marring casings to remove the screen at any time. A touch lifts it out and it is as easily replaced. A hinged screen will not sag. Have screen comfort by using No. 17.

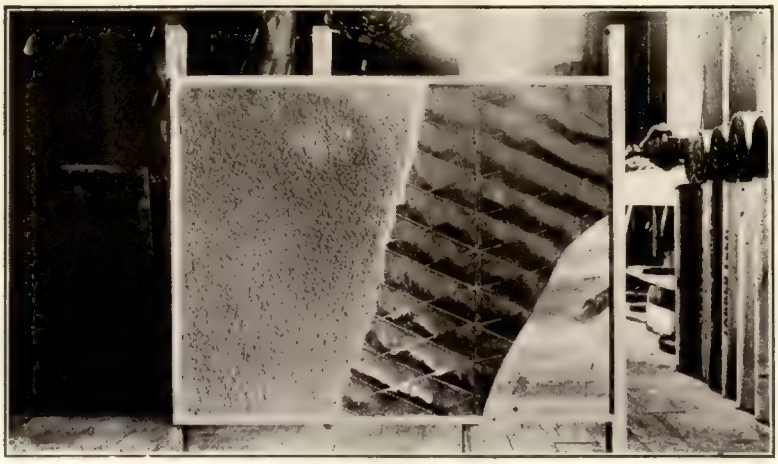


Costs Little—Worth More. Makes screen hanging a pleasure. ¶ All hardware dealers carry them. Insist upon Watrous. Our hinges give perfect satisfaction.

FREE Write for our illustrated and descriptive folder on our full line, "Screen Comfort."

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Made in U. S. A. Spells National Prosperity.



Sample of cement rough-casting on the fabric attached directly to sheathing without furring.

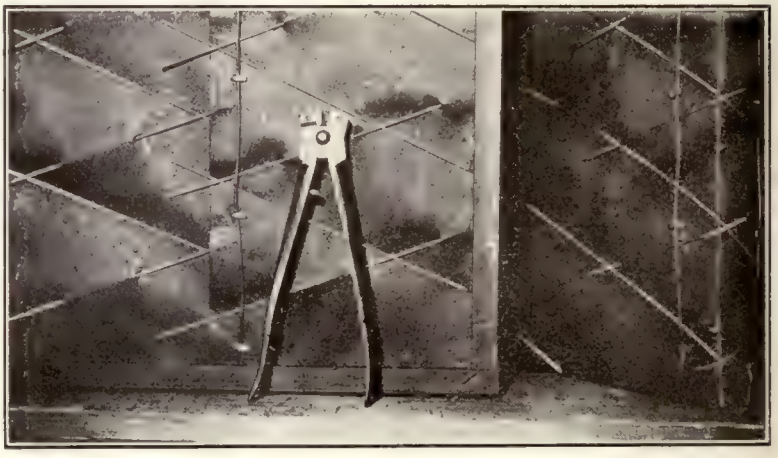
other ways. A new material has lately come on the market by which a plaster or stucco surface may be reinforced by galvanized steel wires crossing on a diagonal, with a tarred felt backing. In applying the plaster or stucco to the surface the wires separate and become embedded in the plaster. Thus a building coated with cement mortar is encased in a thin slab of reinforced concrete.

We are told that the more or less accidental discovery of the perfect bond between cement mortar and roofing felt was the fundamental idea on which this material was worked out, and that the present method of combining it with steel wires which furnish the reinforcement for the plaster slab, is the result of nearly ten years of continuous experiment.

When steel and concrete are combined special precautions must be taken for the preservation of the steel guarding against the incursion of rust. The steel must be completely and closely embedded in the mortar or concrete. Should air pockets in the mass of concrete be formed around the steel, rust will surely follow and will sooner or later destroy the reinforcement. Experiments of engineers as well as experience tends to show that concrete, of which cement mortar is the essential factor, is the best known preservative of steel.

This material may be used for either exterior or interior work, applied over sheathing and studding or to steel rods. It may be used for ceilings and it is even suggested as a foundation for concrete roofs.

The first cut shows a sample of the material partly covered with stucco, and showing the sheathing over which it has been applied; the second gives the method recommended by the manufacturers.



Photograph which shows recommended method of attaching the fabric to wood; also the wire cutter most convenient for cutting the fabric.

That Bungalow

which you intend to build next Spring will need the soft, artistic tones of

Cabot's Creosote Stains

to make it complete and harmonious.

Paint doesn't suit bungalows. It forms a hard, shiny coat that is foreign to their character and "atmosphere." The Stains produce deep, rich and velvety colors that harmonize perfectly with the style of building and surroundings. They are 50 per cent cheaper than paint, and the Creosote thoroughly preserves the wood.

You can get Cabot's Stains all over the country. Send for free samples of stained wood and name of nearest agent.

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Advanced methods of heating your home

Comfort assured

Economy assured

Richardson & Boynton Co.
New York Chicago Boston

All newly painted jobs look alike —for a while. Time reveals the house upon which

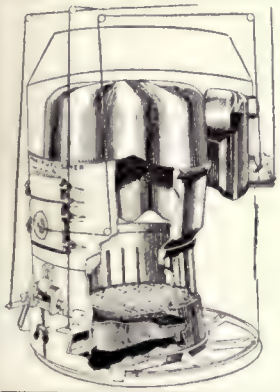
Zinc

was used. Zinc in paint makes paint last.

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1st. It is made from Charcoal Pig Iron, perfectly fitted, every piece being cast, which insures no weak parts to burn out.

2d. It is modern in Construction, having a straight fire pot, taking the draft through slots, which makes perfect combustion besides placing the flame where it will do the work properly. Grate can be removed through ash pit doors, and any section can be replaced without the aid of a mechanic.

3d. It has a large heating surface and also a large casing, which makes it possible to get full capacity without forcing, and insures a cool cellar.

4th. All parts being heavy and substantial, long and satisfactory service is assured.

Further information regarding the *Fuel Saver* will be gladly furnished upon request.

THE WATERLOO REGISTER CO.
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THE ARCHITECT'S CORNER

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Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

Rough Finished Plaster.

Mrs. E. A.—"Could you tell me just the amount of putty, lime and sand used in the rough plaster finish I wrote to you about? The walls I saw in California were beautiful, but no one here seems to know anything about it.

"They were finished in this sand finish and when tinted were just what I want for my little house. People 'sit up and take notice' of this house and I am so pleased and proud of it and it only lacks this sand finish to make it not only the finest but the prettiest in town.

Ans.—In reply to your inquiry regarding sand finish, will say that Page 44, in the book on construction, "The Building of It," seems to me answers same completely.

It is as follows: "It is often desirable to finish the walls with a sand surface for tinting in water color or frescoing. This is called a float finish. It is obtained as follows: First, mix fine, clean sand speccially sifted for the purpose, with the putty and then add a small amount of cement plaster (plaster of Paris), put on with a trowel and brought to a fine sand surface, or finished with a cork or carpet float for walls that are to be tinted or frescoed. It would be well to have the plasterer mix a sample on the wall before deciding upon the exact fineness of this sand finish. I have found in my experience that a mixture of one-half fine white sand and one-half plastering sand, finely screened, will give a desirable surface."

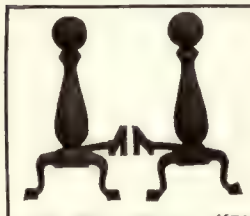
Stock Sizes for Windows.

H. C. B.—"We are trying to get some exact information on the length of windows. Do you make the window opening of definite size? Do they run even feet, or even half feet, or do you just make them as seems desirable from an architectural and economical standpoint? In other words, is there any standard, or set of standards?

Ans.—We are very glad indeed to have you take up with us the usual method which we follow in treating the sizes of windows in residence work. I would say that in most of the designs for the small houses of the bungalow type particularly, we generally aim to use a stock window, double hung sash, which is 2′-8″x4′-10″ and place the top of the window on line with the top of the doors. In work of this kind the doors are usually 7′ high. This treatment makes a very nice frieze line around a low studded room and easy for simple decorative effect.

Two feet eight inches is the maximum width for stock sash for double hung windows, the height may vary from 3′-10″ to 5′-10″. A 4′-10″ window places the sill 2′-2″ from the floor, while a window 5′-2″ makes the sill 1′-10″ from the floor. Stock heights vary by 4″, stock widths vary by 2″.

Casement windows are not kept in stock sizes but must be made to order so may as well be made any size desired.



Beautiful Andirons

Shipped to any railroad town in the United States

Freight Prepaid

Throat Dampers, Ash Traps
Basket Grates, Gas Logs
Spark Screens, Fenders
Fire Tools, Wood Holders

ASK FOR CATALOG "D"
Showing hundreds of designs. Prices very low.

WE PREPAY FREIGHT ON ALL GOODS

It is better to buy our brand new, unsoiled goods of modern design and finish than try to select from the necessarily limited assortments to be found in local stores. Don't buy old-fashioned, shop-worn, unattractive hearth furniture.

SUNDERLAND BROS. CO.

(Established 1883) 323 So. 17th St., Omaha, Neb.



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It Is the GUARANTEED

Vulcanite Asphalt Shingle

They are Absolutely Storm and FIRE PROOF, do not Curl Up, Blacken, Warp or Crack. They make homes Beautiful.

Di-Mack Wall Board—Rock Board

Green or Buff Surface — *Beautiful Duplex Boards* — *Brown or Buff Surface*

The modern wall and ceiling material. It is less expensive as it costs less than lath or plaster, is Warm, Strong, Artistic and Durable. Can be easily applied, painted and decorated. It is a non-conductor of heat and cold.

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WOODS AND HOW TO USE THEM



Intelligence in Using Wood.

OF ALL the materials employed by the builder, wood is used with the least judgment.

For some unknown reason the public has labored under the delusion that all wood is the same. Consequently when building or improving work is undertaken lumber is ordered by quantity and dimension. Little, if any, attention is given the question of whether or not the lumber furnished is suitable.

No other country in the world has produced so many valuable woods as North America. It should follow that the people of America know all about wood values and uses. In no other country, however, is so little attention paid to the selection of woods for particular uses.

The early settlers made their selections and used timber wastefully. The only price they paid was labor. Their reckless use made serious inroads on the supply of certain classes of timber. To make up the deficit in the supply other woods now are being used. It is not so much a question of their being of quality inferior to that of the wood first employed as it is a question of being structurally different. It is for that common sense reason that Keith readers are now offered aid in making their selections.

Keith readers should get away from the national carelessness in using the valuable and varied products of our forests. They should "select" specific kinds of wood for the particular purposes for which they are adapted. They should cease to "order" sizes. This change will place them on a par with the wood users of other countries where the American product is highly prized and is used intelligently.

There is no necessity for you just to "happen" to get the right kind of wood for the purpose for which you desire to use it. You can profit by the use of wood and derive satisfaction from it if you will give this subject a little thought at the right time and that is before the work is started.

One great drawback to the profitable use of wood has been the lack of understanding of the merits and values of particular woods for certain uses. Wood is used carelessly and without thought for its possibilities.

In connection with the purchase of no other kinds of material will the exercise of knowledge and judgment yield so great returns. If individual woods were better known their use would be more satisfactory.

If you elect, you can build a home without using a piece of lumber. Those who know the material best, however, believe that by using wood judiciously and intelligently you can build at less cost and secure a home that in every way is more comfortable and satisfactory.

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When the building idea takes possession of you—and the building idea is dormant or active in every normal person—it is accompanied by a desire to make the home fully expressive of your individuality. You want a home that suits you, one that is complete, harmonious and comfortable. It should appeal to others because of the possible necessity of selling.

When that time comes and you feel the need of unbiased information place your problems before Keith's staff of wood experts.

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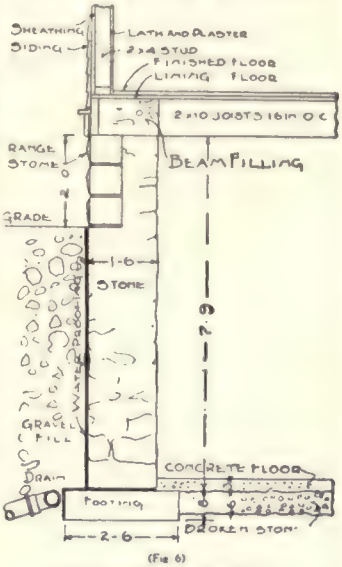
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(Fig 6)
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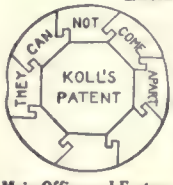
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fit of Keith's readers and will be conducted in their interest. The information given will be the best this country has produced.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

Scope of the Work.

This department will be responsive to the use made of it. In no sense will Keith's print text books, in installments, on lumber and its uses. This is a live department, handling live questions for live people.

Here is one thing you should know, however: There are very material differences in the formation and values of heartwood and sapwood. In some cases the heartwood is of the greatest value, in others the sapwood. Both may be employed to advantage, but where should they be used?

Can you specify the kinds of lumber that should be employed in building porches, pergola, for siding, for floors, for flower boxes or for any other purpose?

Are you content to rely wholly on architect, contractor, dealer or your friends for such important knowledge?

The materials with which you build are factors of as great importance as design and dimensions. On an investment basis they are of greater moment by far.

Would the fact that trim was to be finished "natural," stained or enameled have any bearing on your selection?

Would you employ the same kind of wood for porch floor joist as for joist for the remainder of the home?

It costs nothing to consult this department. Use it in any way it is profitable for you to use it.

In connection with the answers to subscribers' questions, certain suggestions will be made on arrangement and appointment of the home.

A Fireplace Nook.

There is architectural value in the Fireplace Nook. It possesses many attractive features and offers many comforts. It is an alluring invitation to all who enter the room.

Recently it was suggested that a more inviting and home-like appearance could be imparted to a room by building a nook with furniture, evidence that already the home lover feels the need of this semi-private retreat.

It carries with it a suggestion of intimate companionship that can be imparted to a room in no other way. It is an attraction that may be added to city, suburban or country home at very low cost and is one that pays.

Scene: A cold winter evening, a comfortable chair, a subdued light, a good story, a good cigar, perhaps a cigarette or box of chocolates.

A living room provided with a well designed fireplace nook is half furnished. Viewed from that angle it would prove an economy rather than an expense. It provides seats, lounge, davenport, bookcases, catch-alls, woodboxes and other conveniences, and, best of all, it gives all who enter the room a sense of satisfaction in having found one place that is all the heart can desire.

White Ash An Individual Wood.

White ash, a comparatively unsung member of the open-grain, hardwood fraternity, has artistic and practical merits of its own,

A tough, strong, more than ordinarily elastic wood, it has, too, the advantages of a whiter color than that of oak, and a smaller percentage of tannic acid—characteristics that make white ash peculiarly adaptable to some of the more elusive finishing effects produced with light-toned acid stains and contrasting paste fillers. For example, those cool, restful effects that, yet, have a distinctly frenchy atmosphere—silver gray acid stain combined with blue or green paste filler—these effects take with a far greater purity of tone on white ash than on oak.

The grain of ash, too, is a bit coarser, more pronounced, more diversified than that of oak, thus insuring the highest degree of artistic effectiveness from the filler—particularly on the slash sawn timber. In employing these out-of-the-ordinary effects, it is really worth while to overcome our prejudices in favor of quarter-sawn wood, for it's only on the slash grain that the full beauty of two-toned effects is revealed.

The heaviest ash producing belt in North America is, in the states, in the upper peninsula of Michigan and northern section of the lower peninsula; in Canada, the Muskoka and Nipissing districts, parallel to the Ottawa River and east to the St. Lawrence river.



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SPLINTERS AND SHAVINGS

Constructing Flour Bins.

IN view of the fact that many industrious men, handy with hammer and saw, will be making some changes in "wifie's" pantry, the following comments by a correspondent of the *Wood Worker* telling how flour bins should be built are likely to prove interesting:

Not very long ago we were given a job of building a case containing a number of flour bins for a bakery. We understood the fact that a flour bin is so constructed that it tips out of the case. In laying this job out we figured that the proper way was to allow the front to extend about one-half inch below the bottom of bin and shape a concave on bottom end of front, this to set on the base rail, which we shaped a half-round on its upper edge, as shown in Fig. 1. This looks all right on paper, but we found that it would not work. The bin would tip out all right, but would not go back into its proper place.

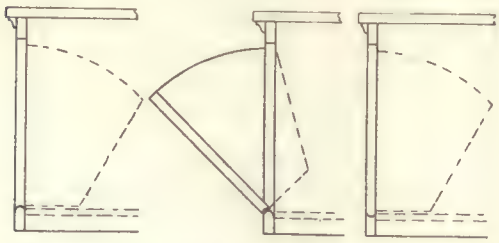


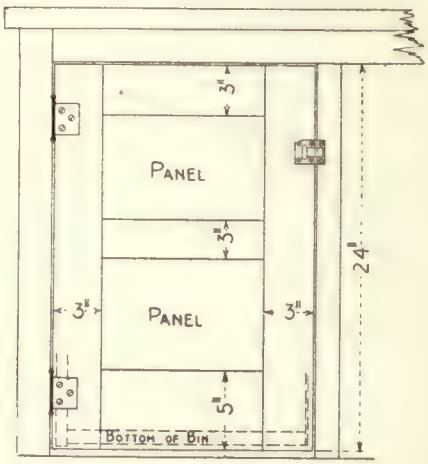
Fig. 1. Fig. 2. Fig. 3.

Details of construction.

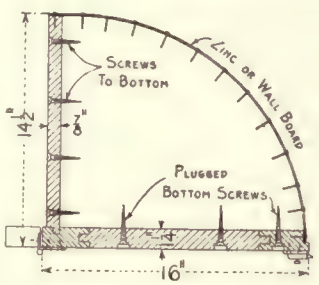
The trouble can be readily seen in Fig. 2. The bin, in tipping out, would ride up to the top of the half-round on the inside and down on the outside. We made up our minds that it was against the law of nature to expect a flour bin to ride down, and, in tipping back, to climb back up again, so we tore off the fronts, also the base.

The construction was changed by shaping a new base rail with a concave on its edge and a half-round on bottom end of front, as in Fig. 3.

There are three general types of flour bins among which the housewife may choose when having the fittings made for her kitchen. The tilting kind here shown have been largely used and are well known. A very simple bin is made like a very deep drawer, set on small wheels which rolls on the floor, but is fitted to its place as snugly as a drawer. It generally takes the full space under the moulding board and will hold a sack of flour. The details are here shown for a newer type which opens like a door and has found much favor with the housewife.



A flour bin which opens like a door.



Elevation and end section of flour bin.

The parts on which the door is hinged must be solid and the door must be well made and hung with not smaller than

3x3-in. hinges. The dimensions here given will hold 50 lb. of flour and provide room for rolling pin, sifter, etc.

The circular part, as shown in the end view, can be made of zinc or tin, but the best material is wall board, which can be obtained at almost any lumber yard.

The North Front.

The American custom of platting streets so that they shall run with the points of the compass, and of setting a house so that one side of it faces due north, is responsible for many unfortunate conditions.

The north side of the street is coated with ice all winter, because the sidewalk is completely cut off from the sun's rays.

Rooms on the north side of a house never receive direct sunlight except for a few hours, morning and evening, at midsummer. If the house be set only a few degrees from the direct points of the compass, north rooms will get a little sunlight either morning or evening.

A French architect, M. Augustin Rey, in an address before a society of civil engineers, says that the people must be aided in the battle for better health conditions by the planning of buildings and especially of tenements so that every nook and corner shall receive its share of the sun's rays for the greatest possible number of hours each day. He says: "Cities should be so planned that the direction of all the streets shall correspond to the sun's daily course in the heavens in order that the inhabitants may receive the maximum of light, light being the greatest microbe killer in existence."

He believes that the present system of small apartments in our cities must eventually give place to some well planned scheme for perhaps small, but airy dwellings for all classes of people.

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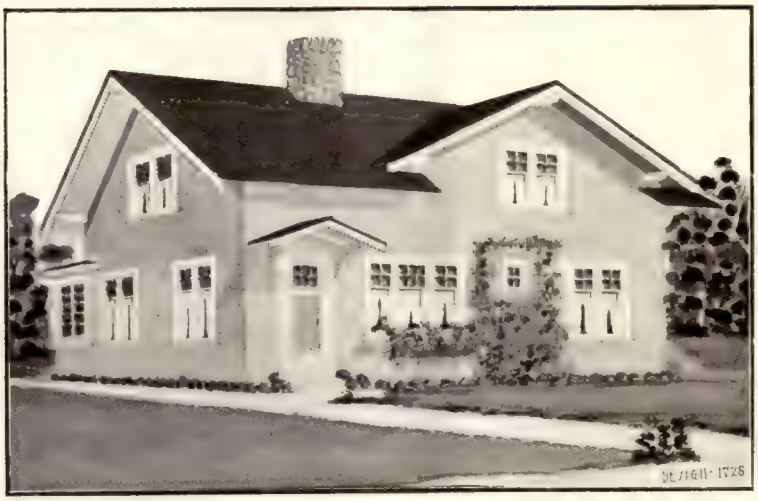
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New Booklets and Trade Notes

"ALL Through the House with Upson Board" is the title of a new and beautiful booklet just issued by the Upson Company of Lockport, New York, manufacturers of Upson Processed Board.

This booklet will prove of unusual interest to those who plan to build or renovate. It shows photographs of a home completely Upsonized—from kitchen to garret. The effects secured are remarkably beautiful and wonderfully artistic. This booklet also shows a number of interesting tests which can easily be made in order to determine the quality of any wall board. A copy is sent along with a painted sample of Upson Processed Board upon receipt of 2c stamp to cover postage.

Wood finished in a satisfactory manner is the foundation of all pleasing interiors. This we are told in the foreword of an attractive booklet on the Proper Treatment for Floors, Woodwork and Furniture, issued by S. C. Johnson & Son, Racine, Wisconsin. The care of floors and of furniture is a subject on which many householders confess ignorance; nor is it an easy subject on which to obtain information. The booklet gives instructions for the use of the Johnson products, which are an acknowledged standard in their lines, as adapted to the needs of all parts of the house; new work or old. Even the automobile may be kept in condition at home.

Their service department is in the hands of a corps of experts who give all questions on wood finishing prompt and careful attention. They request you to bring your wood finishing problems to them with no obligation whatever attached to the service.

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A very up-to-date and practical book, "500 Plain Answers to Direct Questions on Hot Water, Vapor and Vacuum Heating," by Alfred G. King, has just been published by the Norman W. Henley Publishing Company, 132 Nassau St., New York City.

This book is cloth bound, contains 214 pages and 127 illustrations in 24 chapters; giving rules, data, tables and descriptive methods, together with much other detailed information of daily practical use to those engaged in or interested in the various methods of heating.

Five hundred direct questions are answered in simple language, among which are, "Why should a chimney be built round or square?" "What are some of the most frequent causes of trouble or failure on the part of the flue to operate properly?" "What is accelerated hot water heating?" "What is a non-mechanical system of vacuum heating?" "What is the thermostatic principle?" The book would be very valuable to those preparing for examination, and can be obtained from the publisher for $1.50.

To build a fire-proof floor with a large span between supports, which shall be neither cumbersome, heavy nor expensive, is one of the progressive problems of construction. Each season new solutions are offered, with advantages over those used before. The Trussed Concrete Steel Company, of Youngstown Ohio, have issued a fully illustrated pamphlet showing the Steel Floretyle Construction, which they believe marks the greatest advance yet made in fire-proof floor construction. The "Flortyle" is a steel tile 6 to 12 inches in depth which comes in sheets of standard lengths, approximately 20 inches wide. The crowns are stiffened by a deep rib so that it will readily carry the weight of the concrete superimposed upon it. The construction is elastic and light, sound-proof, yet exceedingly strong. Its light weight reduces freight rates.

KEITH'S MAGAZINE ON HOME BUILDING



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Unhewn timbers give a pergola effect to the terrace.

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A Dutch Colonial House

Margaret Craig

IT IS interesting to know that the Dutch Colonial Houses were not a direct offspring of those built in Holland, but were built originally by the Dutch colonists as well as by the English and French who settled among them.

The gambrel roof, whose lines are broken by interesting angles, was an innovation entirely resultant from influences in this country. Brick was used almost exclusively in Holland, while stone, lumber and plaster—the materials at hand—were chosen by the colonists.

In southern California where there is a great demand for the construction of small homes, the Dutch Colonial is found to be very practical. Built with good lines and surrounded with plenty of space, there is no style of architecture more suited to a suburban home.

The home illustrated in this description is a very charming example of a Dutch Colonial house that answers, as



The gambrel roof has an added interest by reason of the dormers.

far as possible, the needs of a modern-times housekeeper, and yet is faithful to the general characteristics of its prototype.

The walls of the first story are of a soft gray green cement, which blends beautifully with the mossy green roof and pearly white trim. The gable ends are treated with broad shakes of the same shade as the cement walls.



The windows are interestingly grouped.

As is true of all colonial houses, the entrance is a very happy note of accent. The semicircular stoop is shaded by the hood, formed by the projection of the eaves of the high pitched roof.



The entrance door has a brass knocker and thumb latch.

The entrance walk to the home leads up at one side of the terrace, while the automobile approach is on the other side, thus leaving a wide space of lawn in front of the house.

In walking around the house to observe its salient features, I noticed the careful grouping of the windows. The owner remarked that it had been one of the working problems of the construction and that the exterior relation of the windows had never been sacrificed to the interior construction. Curves in the house had been used repeatedly to give interesting effects as in a balcony, in the paths, and in the porch.

The entrance door, which is made of a single panel, receives additional interest from the brass thumb latch. The brass knocker is well placed and does not lose its colonial significance by being electrically connected, through the hinges, by a concealed wire. The door is flanked on either side by sidelights, united by a fan light above.

The hallway is very lovely, with walls covered with a mouse-colored paper having a French basket design. Draperies of a rich velure in a deep mulberry shade hang at the wide doors on either side which lead to the living room and the dining room.

Length is given to this hall by a view through the glass door at the end into a quaint breakfast room.

The stairway is colonial with a mahogany rail uniting the ivory white spindles. The wainscoting, here, is unusual, as it has no hard lines, due in a measure to the insertion in the corners of large pieces of sheet iron, that were rounded and painted in the ivory tone used for the rest of the hall. A lamp hangs from the ceiling, made after the fashion of old colonial lanterns.

On the right is the living room, well proportioned, abundantly lighted, and well open to the breezes in summer weather. The fireplace is simply designed with ivory mantel and facing of cherry red brick. The wall covering and woodwork are similar here to that used in the entrance hall and dining room, and it forms a soft background for the Sheraton furniture, which has a neutral brown shade of upholstery.

French doors lead from this comfortable living room to the columned porch at the south and two single French doors open upon the grass terrace, flush with the floor.



The stairway is colonial with mahogany rail and treads.

Opposite the living room is the dining room. Above the wainscoting, the wall is papered with a soft colored striped grey paper in two tones, which harmonizes with the window valences of cretonne in plum color, black and silver flower design. The silver chandelier above the



French doors lead from the living room to the porch.

round English table is quite effective, hung by a plum colored silk cord.

The breakfast room is very pleasing at the end of the entrance hall, papered in an old rose and blue all over designed wall paper. The casement windows, here, forming a curved wall at the end practically make it an out-of-door breakfasting room for the summer. Muslin curtains, ruffled and crossed, that are used in all of the windows of the house are used here also. A cupboard, containing the breakfast china of corresponding colors, was built in under the stairway curved projection, and makes the little room quite complete.

The kitchen of the house is small, but ideally proportioned. Windows, opening upon the wonderful mountain scenery, are above the sink, and the stove is so arranged that light comes in over the right shoulder. An ice-box is built in so that it can be reached from the outside porch as well as from the kitchen without extra steps. The laundry is on the screen porch that forms a hall to the maid's room.

On the second floor there are three bedrooms, two baths and a sleeping porch. These rooms are furnished in mahogany with chintz over-curtains at the windows.

The rear of the house is as attractive as the front of the house and shows careful attention to the grouping of the windows.

It is constructed very thoroughly, which is not always the case with houses of this semi-tropical land. But a solid construction is found to be a great advantage in this little house in keeping out heat, cold and unnecessary dampness.

The Breakfast Room

Charles Alma Byers

THE modern housewife is finding the little breakfast room a most convenient and desirable feature. It is fast becoming extremely popular, even in the small inexpensive home. Especially in California has the breakfast room become a unique necessity. The breakfast is usually a very unconventional meal, and there are many reasons why some small shut-off room where it may be served in strict privacy is to be much appreciated. For one thing it means less work in keeping the house always in order, and then again its table may be kept set for possible irregular breakfast hours without being conspicuous to early morning callers. In the small home of today the dining room is often connected with the living room by a broad open arch, and therefore it affords little or no privacy from this latter room. A special little breakfast room is also more cozy than the regular dining room, and usually it is so designed and located as to receive a flood of morning sunlight, which is to be greatly appreciated. It starts the day more cheerily.



Breakfast may be a very simple affair.

The breakfast room should, of course, be located so as to be convenient to the kitchen, and is therefore invariably somewhere in the back part of the house. Often it borders upon some small side pergola or porch, upon which it opens through glass doors. One or more of its walls should be largely of windows, and from these windows one should be able to



With many windows it receives a flood of light.

look into the garden or out upon some other pretty scene. And, lastly, the room should be located so as to have an eastern exposure, that it may receive the morning sunshine.

In finish and decorations the room should be bright and cheery. In many cases the woodwork is enameled white, and the walls are covered with paper of light, delicate colors. White moiré paper or a delicate tint which softens the sunshine is, in fact, often used with good effect. Cream and buff tones are also much used, and these colors unquestionably give a very warm and cozy appearance. In a few instances I have seen the room done in tones blending into olive green, which produced a most delightful interior. The woodwork is then stained to also carry out the scheme, and the walls will probably be covered with Japanese grass cloth effects. The windows may be curtained with material that either harmonizes or emphasizes the general color scheme.



The windows look into the garden.

Very little furniture is required—a table and a few chairs only. These may be of almost any kind, but if of wicker or willow the room will be made even more bright and cheery. Tables and chairs, of suitable design, are now to be had of this material from almost any furniture store, especially in the natural color. If it is impossible to get them in the desired shade to match the room, the dealer will be able to have them colored to suit.

Some sort of cupboard or sideboard is quite desirable, although not essential. Often such a feature is built-in and is made a permanent fixture, harmonizing, of course, with the remainder of the woodwork. Around the wall may also be extended a small plate shelf, such as is usually employed in the regular dining room. And the room should, by all means, be equipped with some means of heating—either with a gas grate, a small stove, or from a furnace. If the room cannot be made warm and comfortable on a cold or chilly morning it naturally falls far short of serving its purpose.

There are many reasons for recommending that a breakfast room be included in the plans for your prospective home aside from those of its primary purpose. Even if it is eventually found that the breakfast room as such can be dispensed with, it can be admirably utilized for other purposes. Such a room always makes an excellent sewing room, or it may be used as a nursery. Then, too, if the occasion arises, it can be converted into a servant's room or an extra bedroom. In fact, while it is originally planned as a charming little breakfast room, it also may be considered a sort of emergency room. Conditions frequently arise in later years that make another room almost imperative, and of course a breakfast room is never absolutely essential. Therefore you will possess it to fall back upon.



The woodwork is effective.



A circular breakfast room. The adjunct of an elegant home.

This room is usually comparatively small, and yet it is quite large enough to be utilized, if desired, for any of the purposes mentioned above. Eight by ten feet is a very satisfactory size, and it may be even a little smaller, or considerably larger. If a small closet can be built off from it, so much the better, if it should be eventually used for any other purpose.

Herewith are reproduced photographs showing several breakfast rooms of especially charming style. A mere glance at them is sufficient for one to realize that they should aid very materially in making the breakfast a cozy and cheering event, and a more careful study of them will give one some valuable suggestions for making the room what it should be. The invariable simplicity and good taste shown in the finish, decorations and furnishings of the rooms should be particularly observed. In several instances the furniture is exclusively of willow or reed-craft, in the natural or a stained color, and as will be noticed, the effect is charming. Some of the rooms also contain a small,



An octagonal breakfast room.

simply-designed built-in buffet, which constitutes a most admirable feature. The breakfast room is, of course, usually square or nearly square, but one of the illustrations shows a room of octagonal shape and another room is circular. The latter is a feature of a particularly elegant home, and the finish and decorations are especially rich and are very effective.



A built-in cupboard with leaded glass doors.



Glass knobs on the sideboard echo the cut glass.

The question of design for the lighting fixtures has the same relative importance in the breakfast room that it has in the dining room. A center fixture for the ceiling is almost necessary. The standard of design for the commercial fixture is not equal to that in other classes of furnishings. So lighting fixtures must be selected with great care if purchased ready for installation.

It is becoming quite usual, as it certainly is logical, to have the lighting fixtures designed by the architect or decorator in the same way that the sideboard, cupboards, special windows or other features of the interiors are designed. This brings it in keeping with the rest of the interior during the day-time, without in any way interfering with its real purpose when it is illuminated.

In anything so informal as a breakfast room the fixtures can not be either heavy or elaborate. The lighting fixtures in each case shown here are dainty and in perfect keeping with the room, which is a detail that should not be overlooked.

Impressions of English Domestic Architecture

Eleanor Allison Cummins



A bit of Old English.

WHEN I use this phrase I am not thinking of exceptional houses, planned by eminent architects, their cost running into the thousands, not of dollars, but of pounds sterling—I am thinking of the houses of people in modest circumstances, whether in the cities themselves or in their suburbs, or in country places.

For comfort and convenience there is no comparison with our own. The English house is cold in winter and hot in summer; its heating is inadequate, its water supply is limited, its kitchen arrangements are antiquated. Bathrooms are by no means a matter of course, nor does the provision of a stationary bathtub imply, as with us, a supply of hot water. Not very much washing is done in houses but when it is it is achieved in the most primitive way in portable tubs. In city houses the kitchens are usually in a basement wholly or nearly below the street level, and food is carried to and from the dining room over a long flight of stairs. After one is familiar with the routine of an English house one understands why the staff of servants is so large and why the "general" is so overworked.

But when it comes to the esthetic aspect of the English house we can learn many profitable lessons. The standard of taste is much better than with us. Even the interminable rows of tiny houses in the outskirts of London, the homes of clerks and small tradesmen, people living on tiny incomes which, with our higher prices, would not keep body and soul together in the United States, are far more satisfying to the eye than the same sort of houses at home. The improved dwellings for artisans, erected by the London County Council, great blocks six or seven stories high, in which a flat of five rooms can be had for about ten dollars a month, in some neighborhoods for much less, are really creditable architecturally, with well proportioned facades, charmingly pitched roofs and casement windows, arranged at agreeably adjusted angles around immaculately clean courts. Indeed the writer must confess that at her first sight of the Westminster group she supposed she had run upon a collection of studio buildings.

English houses have one great point in

their favor—their solidity of construction. With the exception of a very few timbered houses, preserved as a matter of sentiment, all English houses are either brick or stone, and very ordinary brick and stone at that, the quality of the brick being about the same as that of the cheap red brick which we use for the backs of city houses, or for factories. The stone most frequently used is a light colored sandstone, and most of the bricks are a medium shade of brown which the prevalent soft coal smoke turns almost black. A good deal of dark red brick is used and this, too, darkens perceptibly. Sometimes, but by no means generally, facings of sandstone are used with brick, and in the newer houses concrete walls are common.

The city house, even the city house of pretensions, is extremely plain. There is more architectural distinction in two or three side streets off Central Park than in the whole of Mayfair and Belgravia. Even the London houses of the great nobles are very simple, spacious but in no way ornate, their only dignity gained by their withdrawal behind walls. The average London house stands close to and on a level with the sidewalk and is high out of all proportion to its width. English legs are sturdy and accept bedrooms up three or four flights of stairs uncomplainingly.

But these very simple houses have a number of redeeming points. For one thing, there is always a pillared porch at the door, its top forming a balcony to which one steps from the long windows of the drawing room on the first floor. Sometimes there is an extension of this balcony of narrower width running entirely across the house as well. In spring and summer these balconies are gay with flowering plants and crowned with awnings with a very charming effect.

Some small and narrow houses are without a porch. The door is sure to be



Half-timbered houses are charming.

arched with a latticed fanlight and sidelights and although there is no balcony the French windows of the first floor open onto semicircular projections closed in with well designed iron railings, the enclosed space just big enough to hold a bay tree or other bit of greenery.

The door and the windows play a great part. One does not often see the hardwood doors of which we are so fond. The door is usually enameled in some decided color, usually green, though a dark blue is very common, and even red coach varnish is pressed into the service. If the door is green the window frames and sills will be green too, otherwise they will be white. This treatment sets off a house wonderfully and the windows themselves are often charming. There is a great fondness for whole windows made up of little leaded panes with possibly a bit of ornament at the top traced with the leaded lines. Very often, too, the windows are casements, usually opening in, so they need not interfere with the window boxes.

Light is rather precious, under the low and often clouded English sky, and window openings are many and large, and add greatly to the appearance of the houses. I remember a charming concrete house in Kensington which seemed almost all windows on two stories, seven being set in the section on one side of the door, whose end was semicircular, the other side having a single very wide and rather low window on each story. All these windows were leaded and in small panes, and the curtains of beautifully colored fabrics added much to the effect. I do not think English window glass is often plate, and it is always cut into panes of moderate size. On ground floor windows some sort of a screen is often adjusted to the lower quarter. It may be of small leaded glass squares, it may be a panel of carved teak, of Turkish or Japanese lattice work, or it may be of wicker, and thin inside curtains are dispensed with.



The window openings are many and large.

While flat roofs are common enough in cities they are by no means universal and are rarely seen in the suburbs or the country. The English architect is alive to the decorative value of the sharply pitched roof, sometimes beginning it just above the first floor and including two upper stories under its slope. The sky line in England is almost always interesting and the size of the chimneys, accommodating as they must from eight to a dozen flues, from as many open fireplaces, is an im-

portant factor. You may have two high, flat fronted, pitched roofed houses standing side by side with the great chimney thrusting forward almost to the line of the cornice in a most effective way, and the outline gains much from the chimney pots, the upward extensions of the flues, which often have some sort of an ornamental cap. To see this combination of roof, chimney and chimney pots at its best, you should be out early in misty, gray winter morning when all details are lost and only the picturesque outlines are thrown up against the sky.



Pitch roofed houses standing side by side.

The paint pot plays a great part in England. With the first spring days the accumulated grime of a twelvemonth is cleaned off the dingy stucco-fronted stone or brick houses to be replaced presently by a coating of ivory white paint. In the case of the brown brick houses only the ground floor and the trimmings of the house will be painted but the others are entirely repainted. When the window boxes and balconies are ablaze with flowering plants the general effect is so charming that you quite forget that most of the houses have no architecture to speak of.



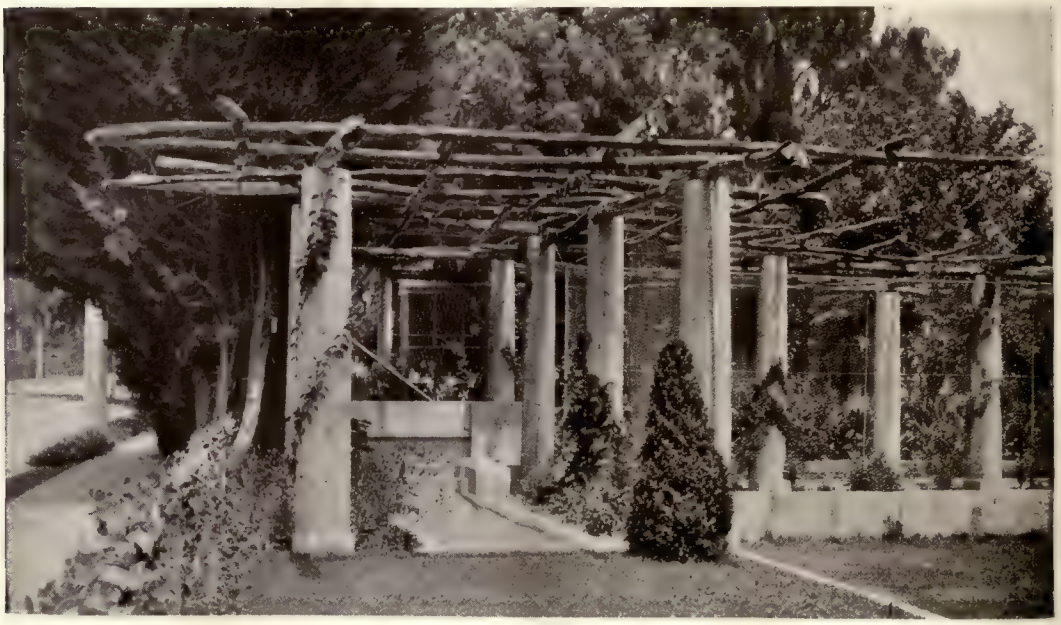
A picturesque street in York.

The equable temperature has something to do with the charm of the English house. Shrubbery is luxuriant and at least partially evergreen and the grass is green in midwinter, and the great number of small squares and "gardens" secure a pleasant outlook for a large proportion of the houses. The crescents, long curving rows of houses, are carried around a semicircular space of trees and grass, common, as are the squares, to all the residents of the row, each house having its key, its children playing, and its dogs taking the air in the enclosure. The arrangement is not democratic, but England is preeminently the country of the few and not of the many.



The Use of the Pergola

PERHAPS no feature of the out-of-doors makes a stronger appeal than the pergola, vine covered, and with a setting of flowers. When a beautiful pergola and formal garden are made as simply an unused adjunct to an elaborate house one feels that it is a lost opportunity. The more completely it has been planned and worked out, the stronger is the feeling likely to be, and this for a very simple reason. The people who are able to build the elaborate pergolas have so many other interests that either they do not know how or do



With cement posts and rustic timber work.

not care to use so simple a pleasure. Blessed is the man, and more especially his family, who can do both.

Perhaps this is the reason that the unpretentious affair, built of trees that have been cut in the woods, if one is so fortunate to have access to the woods, with unhewn beams overhead and rustic trellis work has such an attraction for us. The interest and the labor of the different members of the family are so intimately connected with it. Perhaps the remembrance of the weariness of its making emphasizes its restfulness when completed.

The original use of the pergola was that of a covered walk, wide enough for seats at either side, such as the pergola at the Capuchini convent at Amalfi in Italy, so well remembered by travelers and so well known in pictures, leading from the convent, now a hotel, to the summer house overlooking the Bay of Naples. We have a tendency to make the pergola itself into a summer house, with seats and places for tea table and hammocks, protected by its screen of vines and climbing flowers.

The pergola, when once built, grows in usefulness and beauty from year to year with a small amount of care. But the growing things are the work of each coming season. A rough arbor is all that is really necessary to support the vines, make place for flowers, and give shelter and shade, yet the beauty of the pergola itself carries one into more ambitious projects. The ease with which white cement may be handled tempts one to use it for the garden settings, using the rustic timber work for the beams overhead and trellis work. Seats and perhaps a fountain seem naturally to follow and a beautiful garden is achieved.



A very simple arbor will support vines.

Linking the Garden with Home Life

M. Roberts Conover

IF one owns a garden merely for its products it may not enter into his life and thought any more than would a city market, a huckster's wagon or any other source of supply, for in that case of course it is a vegetable garden. Where a garden bears such a remote relation to its owner its possession is of value only in an economic sense.



It should bring beauty into the family life.

Notwithstanding its wide utilitarian purpose, the word garden has a fragrance and a sense of freshness. Important as it is as a source of supply, it is rightfully a much greater factor in the home life. Granted that it should bring beauty to the family life, there is yet another relation which is of greater importance and this comes through the personal interest of those who tend it.

This kind of enthusiasm is akin to that elemental emotion which gathers around the acquisition and is inspired by the possession of a home. It inspires a man to labor such as he would not think of doing for a greater cause. You could not hire a man to work for you as he will work in his garden. Even the traditional boy will work in his own garden, much as he may resent weeding the garden which belongs to the family as a whole.

It is unfortunate perhaps, in many ways, that this care of the garden should in so many cases be entirely the work of hirelings. Probably no other possession can give a greater common interest to the family as a whole. Every family having the available space should be capable of achieving a successful garden, each member undertaking a part which appeals to him most.

It is astonishing how wide a field of subjects is covered in the simple making of the family garden. First in matter of time and possibly of importance is the chemistry of the soil, the food needed for the growth of the plant. This may appeal to the youth in college, while the daughter of the house may be more interested in the color scheme of the finished result, that there shall not be too many scattered flowers. The green of the sod is the background on which the color of the garden is painted.

Then there is the shrubbery, the old-

fashioned perennials which may have a touch of sentiment in their selection. The placing and selection of a few trees. And, not by any means last, the vegetable garden, which may have a screen of hollyhocks or sweet peas.

All of the family, husband, wife, children and even the guest may find something about the garden to touch them personally, something which gives delight as well as occupation. It may be the joy of the flowers, the wonder of its rapid and changing growth or in the fact of its response to care.

To make its interest real, its work should be so apportioned that each member of the family has some definite part in its care, else the work may suffer because the general responsibility is not individualized.

Children can help much with the actual care of the vegetables and flowers as well as with the gathering of the garden's products and they are the better for it. Pay them for a certain proportion of the berries they pick, or of the vegetables which they bring in to the cook as she wants them, and they will see the reason



In some part of the garden there should be a rest spot.

for raking, hoeing and weeding and all of the multitudinous labor in the preparation of the garden.

In some part of the garden or near to it, there should be a rest spot, either a simple seat under a tree or some other shade—something that will invite the family in their rest moments. Make a place for a hammock and a book and perhaps a tea-table, something that will invite the family and the guest out of doors.



A rustic seat of cobble-stones and brickwork under a tree.

The Treatment for a Corner Plot of Ground

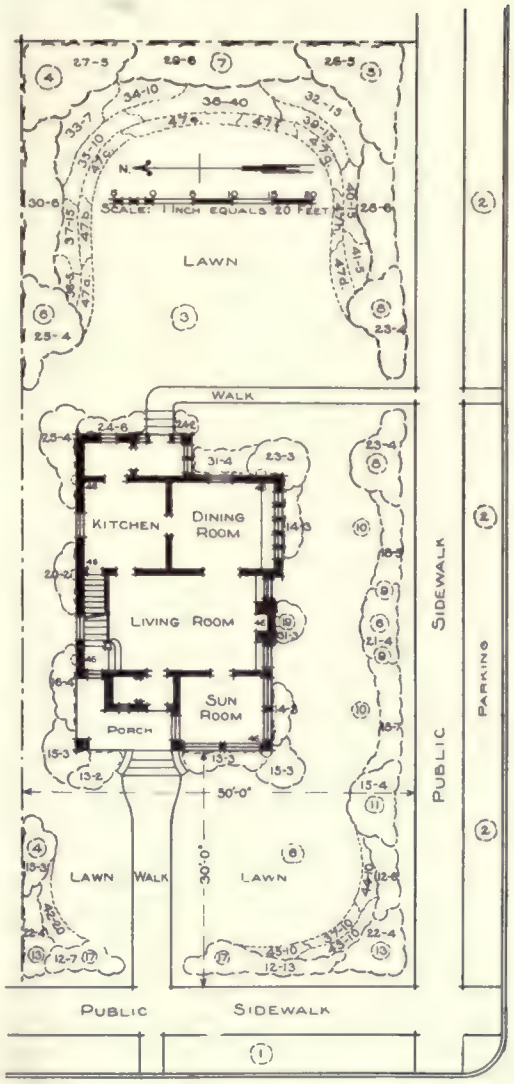
WHEN a plot of ground faces on two streets a larger opportunity is given for a treatment of both the house and grounds. The results may be much more satisfactory than when the lot is enclosed on both sides by property over which one has no control. People are beginning to seek simple lines for their homes, and to build of good substantial materials, at the same time having an eye to color and to general livable conditions. The house here shown is a satisfying solution of the living question. From the outside it is dignified and restful. The plaster frieze, in which the second story windows are set, above the brick veneer, gives good proportion and color. Even a veneer of brick has lost its insincerity to us, for it is not treated as an imitation of a solid brick house and deceives no one, nor is it intended to deceive. Brick makes a better outside surface than siding, shingles or plaster and it is very commonly used as such. Indeed modern construction scarcely knows a masonry wall which is surfaced with the same material of which it is built.

The internal arrangement of the house is essentially modern. The living room is the key to the whole plan. It is good size, with the fireplace seats and windows taking one side. It communicates directly with both dining room and kitchen. The dining room has an attractive group



People are beginning to seek simple lines for their homes.

Planting List.	Plants	Feet apart
1. American Elm (Ulmus Americana) or (for St. Louis and south) English Elm (Ulmus campestris)	1	...
2. Sugar Maple (Acer saccharum) or (for St. Louis and south) Norway Maple (Acer platinoides)	3	...
3. Hackberry (Celtis occidentalis)	1	...
4. Ash (Fraxinus Americana)	2	...
5. Bolleana Poplar (Populus Bolleana)	1	...
6. Mountain Ash (Sorbus aucuparia or S. Americana or S. quercifolia) or (for St. Louis and south) Maiden Hair Tree (Ginkgo biloba)	3	...
7. Thorn (Crataegus coccinea) or (for St. Louis and south) Bechtel's Crab (Pyrus Bechtel)	1	...
8. Buckeye (Aesculus glabra) or (for St. Louis and south) Flowering Crab (Pyrus floribunda)	2	...
9. Mock Orange (Philadelphus coronarius)	2	...
10. Persian or Rouen Lilac (Syringa Persica or Chinensis)	2	...
11. Russian Olive Eleagnus angustifolia or (for St. Louis and south) Hercules Club (Aralia spinosa)	1	...
12. Japanese Barberry (Berberis Thunbergi)	26	2
13. Bridal Wreath (Spiraea Van Houttei)	7	4
14. Weigela (Diervilla rosea)	6	3½
15. Tartarian Honeysuckle (Lonicera Tatarica)	13	4
16. Snowberry (Symphoricarpus racemosus)	4	3
17. Sweetbrier Rose (Rosa rubiginosa)	2	...
18. Japanese Rose (Rosa rugosa)	12	2½
19. Flowering Plum (Prunus triloba)	1	...
20. Yellow Flowering Currant (Ribes aureum) or (for St. Louis and south) Five-leaved Aralia (Aralia pentaphylla)	2	4
21. Snow Garland (Spiraea arguta)	4	2½
22. Ash-leaved Spirea (Sorbaria sorbifolia or (for St. Louis and south) Weeping Forsythia (Forsythia suspensa)	8	3
23. Lemoine's Syringa (Philadelphus Lemoinei) or (for St. Louis and south) Common Barberry (Berberis vulgaris)	11	4
24. Indian Currant (Symphoricarpus vulgaris)	8	2
25. Cranberry (Viburnum Opulus)	8	4
26. Common Lilac (Syringa vulgaris)	5	4
27. White Lilac (Syringa vulgaris alba)	5	4
28. Hydrangea (Hydrangea p. g.) or (for St. Louis and south) Regel's Privet (Ligustrum Regelianum)	6	3
29. Siberian Dogwood (Cornus Sibirica)	6	4
30. Persian or Rouen Lilac (Syringa Persica or Chinensis)	6	4
31. Peony in variety	7	2½
32. Larkspur in variety	15	1½
33. Hollyhock	7	2½
34. Giant Daisy	10	1½
35. Phlox in variety	10	1½
36. Bleeding Heart	5	1½
37. Japanese Bell Flower (Platycodon)	25	1
38. German Iris in variety	40	1
39. Pyrethrum roseum	15	1
40. Shasta Daisy	15	1
41. Lemon Lily	5	1½
42. Columbine in variety	20	1



43. Oriental Poppy	10	1½
44. Perennial Flax	10	1
45. Oswego Tea (Monarda)	10	1
46. Engelmann's Woodbine (Ampelopsis Engelmanni) or (St. Louis and south) Boston Ivy (Ampelopsis Veitchii)	6	...
47. Annuals—select own colors		
a. Dwarf Snapdragon		
b. Annual Pinks		
c. Annual Larkspur		
d. Dwarf Marigold		
e. Petunia Rosy Morn		
f. Scabiosa		
g. Zinnia		
h. Verbena		

Note.—The first number in a plant-bed indicates the kind of plant shown in the planting list. The second number indicates the quantity of that kind in the space designated. Circles represent individual plants, half-circles represent vines.

Estimate of Cost.

Cost of Plants.		
7 large growing trees at $2..	$14.00	
7 small growing trees at $1..	7.00	
151 shrubs and vines at $0.25..	37.75	
197 perennials (except Peonies) at $0.15	29.55	
7 Peonies at $0.75	5.25	
10 per cent additional for freight and packing charged extra	9.35	
		$102.90
Cost of Preparation of Soil. (Omitting cost of extra black soil and clay if needed)		
1 man digging 2,300 sq. ft. plant beds, 9 days, at $2	$18.00	
1 man planting trees, shrubbery and flowers, 3 days, at $2	6.00	
		24.00
		$126.90

of windows and the kitchen is well arranged with the pantry making the communication between the kitchen and dining room. The range should have a hood over it, vented into a tile connection to carry off odors from the cooking. It is especially desirable in this case as the kitchen opens directly into the living room. The second floor is compact and well arranged.

The Landscape Scheme

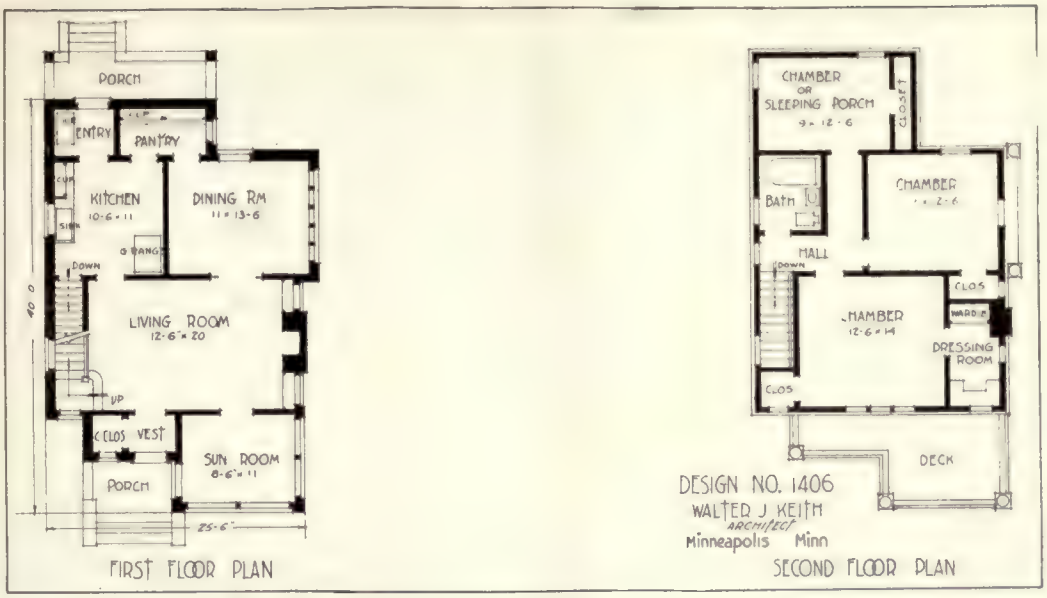
Wyman P. Harper, Landscape Architect

The planting plan this month shows a very satisfactory method of arranging garden flowers where it is not feasible to have a formal flower garden. The great temptation to flower lovers is to place their favorites in the most conspicuous places in the yard, a purpose which is in itself highly laudable, but usually at the expense of that even more beautiful object, the lawn. The purpose of this plan and article is to show how one can have both lawn and garden, each enhancing the beauty of the other.

It should be noticed first of all that the flowers are all supplementary to the shrubbery. The shrubbery is the background without which the flowers would lose much of their ornamental value as growing objects. Incidentally, it may be noticed how well the house plan fits the lot, leaving a proper proportion of lawn and planting between it and the property lines.

No difference is required in soil preparation between shrub and flower growing; the shrubbery beds are only made a little wider. After the shrubs have been planted and tamped and the rough work is all out of the way the flower beds may be raked and the flowers planted. It is taken for granted that the hardy flowers have been ordered from a nursery and delivered just as with shrubbery, and that they are to be planted similarly using a judicious amount of brains in the process. Most things may be placed well into the soil but the German Iris is an exception and should have its large root-like stem on the surface but with the roots themselves beneath. All need frequent and thorough watering, of course, and, what is the same thing, frequent cultivation, especially a stirring of the soil after every rain because that process helps to retain the moisture.

The method of planting annual flowers is not different, but the method of securing them is. All may be purchased direct from a florist if one wishes but there is much more fun in raising them from seed oneself. None of them should be sown in place but in a seed bed from which



they should be transplanted later, or, better, twice transplanted. Some of them, in fact, need to be started in a hot bed or cold frame in order to give any bloom before the summer wanes. To start them in the house is the same thing. But after they have reached some little size and vigor and the danger of frost is passed the annual flowers may be placed in their final position and from then on until frost comes count just the same as hardy flowers. The latter may be planted as early as the ground permits as a little frost does not hurt them especially as most of their growth is below ground for some time after planting.

The arrangement indicated, of putting the annuals in front, is purely one of convenience. Since they must be planted every year it is well to keep them together so as not to disturb the roots of the hardy perennials. A certain proportion of annuals are necessary in every garden for most of the perennials do not have a long season of bloom, however indispensable they may otherwise be, while the annuals, after they once start, bloom continually. Another reason for putting the annuals in front is that they always remain attractive in appearance until the end of the season while some of the earlier flowering perennials may become weedy.

The flowers in the planting list are the hardiest and best of a long catalogue. Other kinds may be used for variety or in a larger garden but these are surely substantial. The earth for the last one hundred years has been searched for flowers in a wonderful way and our gardening at present is something that Queen Elizabeth or our early American fathers never dreamed of.

One point as to color. The flowers of shrubbery come so infrequently that we do not have to give much consideration to their color combinations. With annual and perennial flowers it is different, but it is generally safe to divide all flowers into two classes, those which are pink and those which are orange. The blues, whites and the light shades are apt to harmonize anywhere; it is the strong colors that need watching.

At least a few flowers should be planted with every shrubbery border, and as a rule they should be kept in one part of the yard and not placed promiscuously.

A Brick House with Shingled Gable Ends

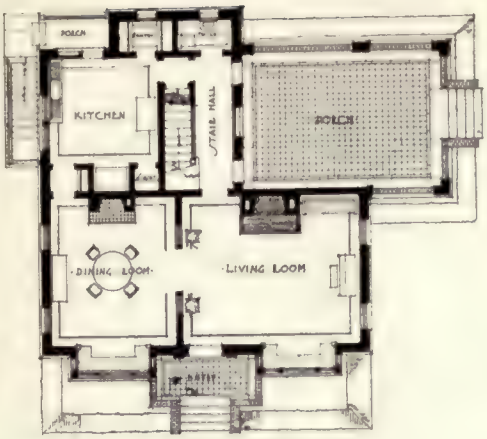
EVEN when the eaves are low and overhang the first floor, a brick wall gives the house a sense of distinction, as the low eaves give it a sense of comfort. This house with its entrance recessed between the two projecting bays has been cleverly planned to utilize the space, and has almost a full story under the steep roof. The large open porch almost doubles the living space as it is accessible from the kitchen and may be used as dining as well as living porch. The arrangement of the stair hall gives a solution of the vexed problem of direct communication between the entrance and the second floor without going through the living rooms. The stair entrance is from the porch, yet is as convenient from the kitchen as from the living room. A fireplace in each of the living rooms, including the bathroom, gives an unusual arrangement yet it is not uneconomical of space. A fireplace in each sleeping room is a luxury that is very enticing. One would be tempted to stay at home from business occasionally in order to enjoy it.



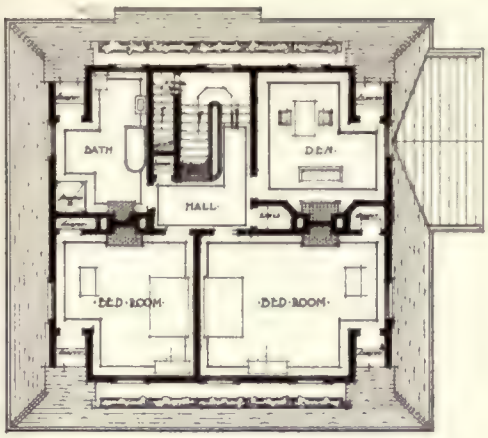
With entrance recessed between two bays.

The dormers on the second floor are again cleverly arranged to give full headroom in the bedrooms. The steep roof is utilized still further to give room on the third floor with windows in the gable, and opening through the roof above the dormers.

The entrance is recessed, but opens



FIRST FLOOR PLAN.
SCALE-⅛"-1'-0"



SECOND FLOOR PLAN.
SCALE-⅛"-1'-0"

directly into the living room. Opposite the entrance is the fireplace. Both living and dining rooms are of good size. Each has a projecting bay of six windows, with a seat. Sliding doors throw the two rooms together. The kitchen is large, with a tiled recess for the range and a hood over. The same flue serves the range, the dining room fireplace and the two rooms on the second floor. The chimney in the living room takes care of the furnace flue and two rooms on the second floor as well as the living room fireplace.

A china cupboard connects the dining room and the kitchen, with a kitchen closet on the opposite side. A store and refrigerator room is beside the rear porch and may have an outside ice door. A toilet room opens off the rear of the hall. The projecting eaves give a good place for flower boxes under second story windows.

A White and Red Color Scheme for a Stucco House

A ROUGH cast stucco exterior lends itself particularly well to the simple lines and hipped roof treatment shown in this design. The red roofs and brick steps and brick in the porch floor give an acceptable touch of color with the light tone of the walls.

The plan is of the central hall type so popular in the planning of the larger and more pretentious dwelling but not so often found in the modest home.

The main entrance is at the side sheltered by the overhang of the second story as well as by the extended porch roof. Beside the vestibule is the coat closet at one end of the hall, while opposite is an attractive stairway with a landing up three steps, from which opens a door communicating with the kitchen, making a combination service and main stairs. A good sized toilet room is placed under the stairs. The living room extends quite across the front of the house. Its massive brick fireplace fills the entire end of the



Rough cast stucco with red roofs and steps.

room, with high casement sash over the mantel shelf at each side. Bookcases are built in beside the fireplace. French doors open from the living room on to the sun porch. A similar treatment is used between the hall and dining room. In the dining room is built in a combination buffet and china closet extending across the whole side of the room. There are drawers and cupboards under the serving

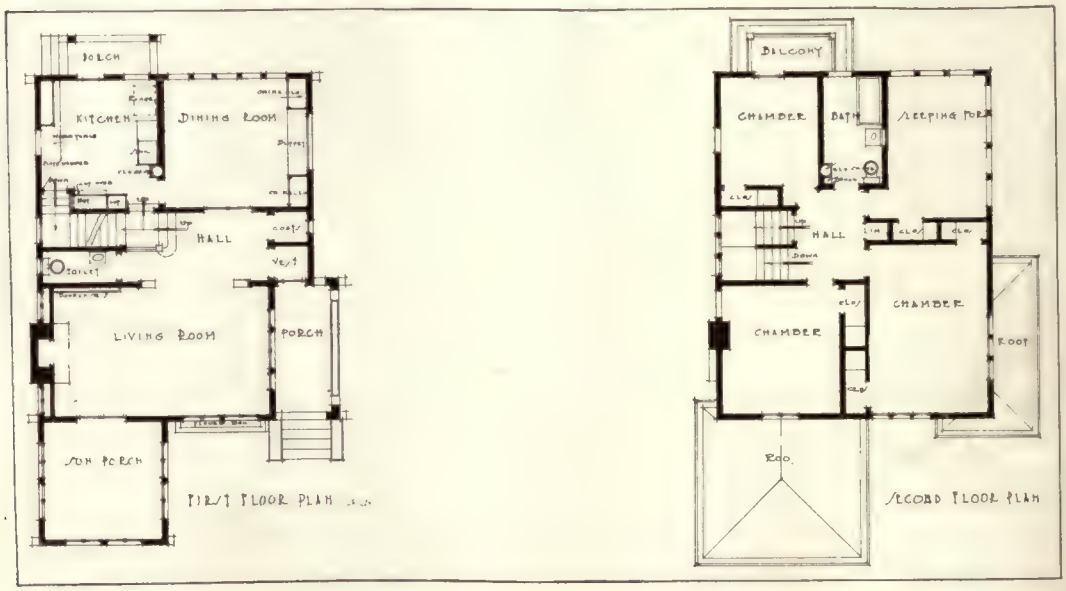


table and cupboards on each side with doors filled with glass, either leaded or set in copper bars, to match the window between.

The kitchen is very complete with its built-in work table, flour bin, a radiator for plate warmer, cupboard for table leaves, clothes chute, etc. The refrigerator is iced from the entrance at grade level. There is a high cupboard over the refrigerator, with the cupboard for table leaves beside it.

On the second floor are three airy chambers beside a fourth filled with windows serving as a sleeping porch. There is a small balcony to be used for airing bedding. Each room has a closet, while the owner's chamber has two. A linen closet is provided off the hall. A stair leads to a well ventilated attic. In the bathroom is a built-in medicine cabinet, clothes chute and broom closet.

The basement is very complete and convenient in its arrangement. The plans provide for a light laundry, furnace room, vegetable and fuel rooms.

The first floor is finished in quarter-sawed white oak with plain oak floors; the other floors are of maple, with tile in the bathroom. The second floor is finished in pine for white enamel, with birch doors stained mahogany.

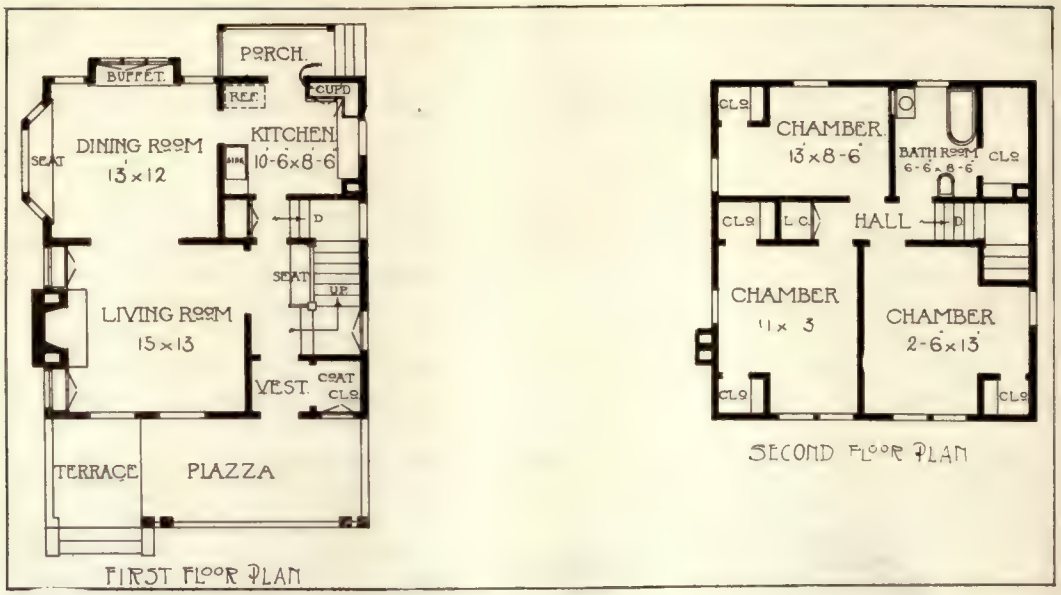
The exterior walls are frame with white cement plaster over galvanized metal lath. If desired, on account of the simple lines, hollow tile might be substituted at a small additional cost. The roof shingles are stained a deep red. Porch floor and steps are of brick.

Boulders for a Bungalow



Imagine it with roses clambering over the stone work. *Bungalowcraft Co., Archts.*

THIS bungalow was scarcely completed, so the photographer tells us when this picture was taken, and he suggests that we imagine what its appearance will be when it is ivy-clad, with climbing roses clambering over the rough stone work of the terrace and chimney. The cedar shingles of the outside walls and roof, with their brown stain, make a good setting for cobble stones, and attract the attention of the passerby as good cobble stone work always does. The covered part of the front porch is 8 feet by 16 feet and an 8-foot wide, open



a projecting bay window with a seat, also a built-in buffet with drawers and cupboards under and high windows above the serving table. The kitchen is well arranged with sink on one side and cupboards and a long work shelf or serving table on the other. There is a separate flue for the range, which will stand conveniently near the serving table. It is a good idea to have the table near the range zinc-covered, so that hot dishes and pots may be set on it at the convenience of the cook. The refrigerator is so placed that it may have an outside ice door if desired, and be iced from the rear porch.

There is a full basement under the house, with accommodations for the heating plant and laundry. The foundation walls are of concrete, with cement base at the grade line.

The main floor may be finished in birch throughout if desired, with birch floors, or oak finish may be used in the main part of the house and birch be used only for the kitchen.

On the second floor are three chambers, with closets under the roof, one chamber being blessed with two closets. There is a good linen closet opening from the hall and also a closet from the bathroom. The interior woodwork of the second floor is designed for hard pine with a natural finish and birch floors.

The roofs are broken by dormers, front and rear, and all are shingled. A memoranda for exterior treatment suggests that the shingles be stained a rich reddish brown color, and that all of the outside trimmings, cornices, casings, etc., be given a brown creosote stain. Paint all of the outside sash white and give the cement wall a light cream tint, selecting tones to bring all together in an harmonious whole. The cornices have a wide overhang and the gables have virge board and brackets with the rafters exposed on the under side. A very good effect may be given by painting the soffit of the cornices a light cream color with the outlooking rafters stained brown.

According to the architect's estimate this house may be built for a sum varying from $3,200 to $3,800, exclusive of heating and plumbing.

An Attractive Northern Bungalow

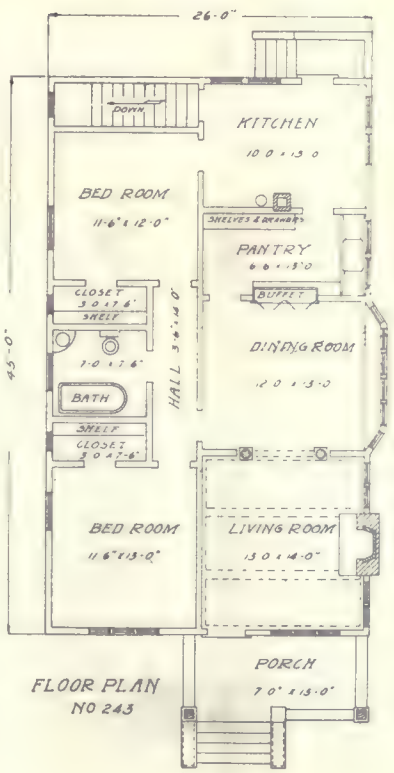


With white trim and cornices. *Jud Yoho, Archt.*

THE white trim and cornice with its brackets and rafter ends, emphasizes the irregular lines of the roof, and gives an unusual note to this bungalow planned to meet the conditions of a cold climate.

Designed for a deep, narrow lot, the rooms are all carefully proportioned, more attention being paid to pantry and closet space than is usual in small homes.

The arrangement of the kitchen and pantry has some features of especial advantage. The chief uses for a sink are the preparation of vegetables, the washing of dishes, and the washing



of cooking utensils. A sink in the pantry is very desirable, because dishes brought from the dining room may be washed and put directly into the cupboards without being taken to the kitchen. But for vegetables and cooking utensils it is more convenient to have the running water in the kitchen. Generally the sink is placed without question in the kitchen. In this case it is placed in the pantry with full drain boards beside it. The kitchen chimney is beside the pantry door so the sink will be more convenient to the range than if it were on the opposite side.

The bedrooms at either corner of the house are of good size and the windows are so located that the bed and other furniture can be placed in different locations and at each moving make the room look larger. Did you ever try this?

The living qualities of the bedrooms are increased by the size of the closets, which are in reality small dressing rooms, each having a window and ample length. The central hall giving access from the bedrooms and bathroom to the rest of the house is an especially commendable feature.

The living room off the substantial-looking porch has beam ceiling and a broad, handsome, brick fireplace. The entrance from this room to the dining room is through an artistic opening which gives an idea of additional space in each of the rooms it separates, and forms the frame for the attractive buffet on the opposite wall of the dining room. The entire outside wall of the latter room juts out, forming an immense bay with six lights and a ledge within for flowers, or if preferred, for a window seat. Whichever is desired for this corner, the light from these huge windows is unsurpassed.

The cellar stairway near the outside door is a convenience that any housewife will appreciate and the large well lighted basement provides space for furnace, fuel rooms and laundry.

Homes of Individuality

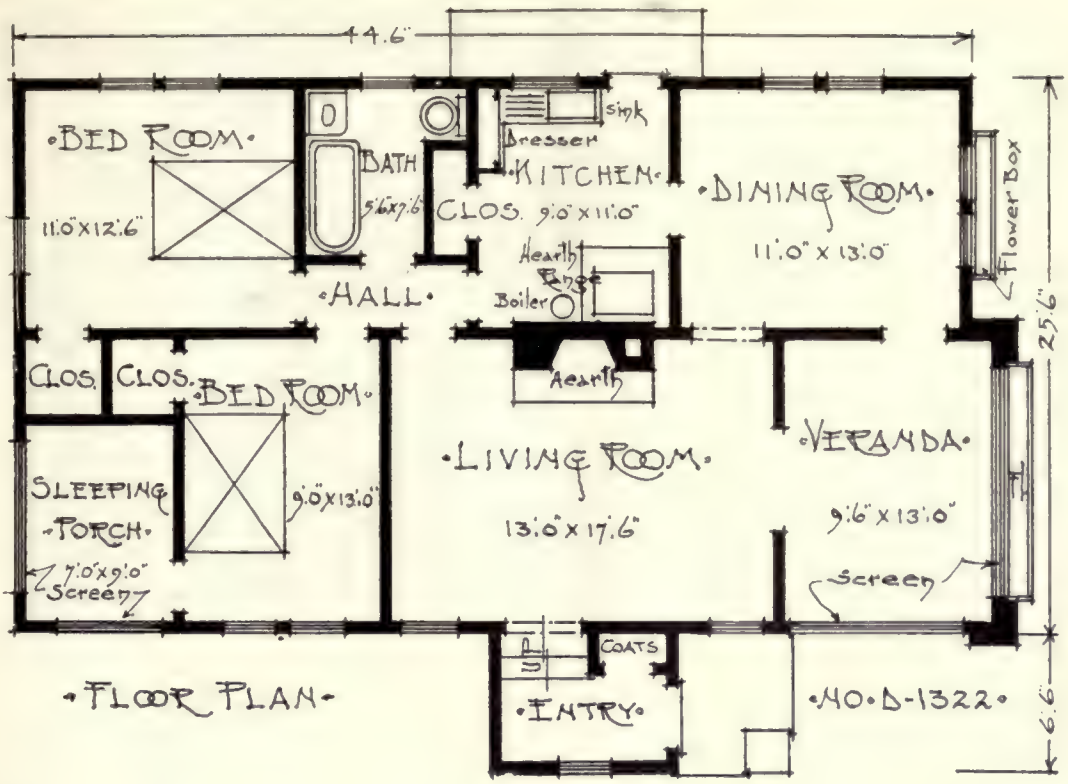
Selected by W. J. Keith, Architect

A Bungalow of Shingles and Stucco

PERHAPS no combination is more generally pleasing than that of stucco and shingles. Built on the low lines which have become so popular since their general adoption in California, this bungalow is at the same time very well planned. It is extremely livable in its arrangement, because the housewife may keep a supervision over the different parts of the house with so few steps. She can be "at home" in the living room, yet know



Built on the low lines so popular just now.



just what is going on in the kitchen at the same time.

The entrance is from the ground level, with two steps into the living room. One end of the house is devoted to the living rooms while the sleeping rooms are more or less secluded in the other end of the house, and include a sleeping porch. Closets in each room are well arranged. A tiny hall communicates with the sleeping rooms and bathroom and separates them from the living part of the house.

The exterior is no less attractive than the interior. Stucco is carried from the ground up to the sills of the windows, and the walls are shingled from the sills up to the under side of the roof, and stained a dark brown, as is all of the timber work. The stucco piers at the corners of the porch carried up to the top of the window openings receive the brackets for the roof and break the dark frieze in which the windows are placed.

A Color Scheme of White and Green

The simplicity and the dignity which the colonial builders succeeded in instilling into their buildings is often lacking in our modern, restless time. It is entirely independent of the size or structure of the house.

The sturdy posts of the long veranda, together with the wide white siding and green blinds, give a charming simplicity to this design which relates it to colonial days. The center balcony is entirely reasonable, though unusual and the flower boxes under the second story windows add interest.

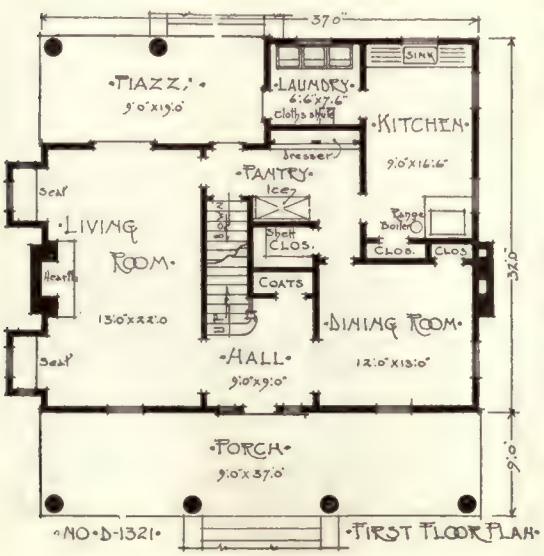
The floor plan is carefully studied giving a long living room on one side of the entrance hall with fireplace and seats on one side and a good wall space opposite. The porches on the front and rear both give access from the living room. The dining room and kitchen are well arranged on the other side of the house, with good

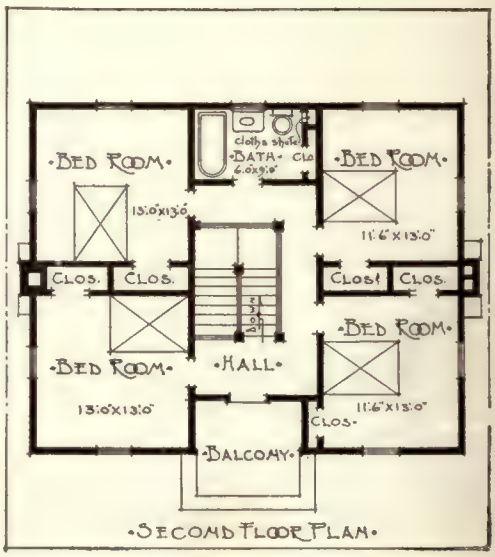


A house with simple dignity.

cupboard and closet space. The refrigerator is near the piazza door and may be iced without trampling through the house. The laundry is placed beside the kitchen on the ground floor, instead of in the basement, making a convenient entry to the kitchen when the tubs are not in use.

There is a full basement under the main part of the house. There is a coat closet beside the stairs, convenient to the entrance. On the second floor each of the four rooms get breeze and light from two directions and are of fair size. The sweep of the roof makes the porches a part of the house, and at the same time gives more room on the second floor. It is a most attractive yet economical arrangement.





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The Prevalence of Violet

IT IS many long years since lavender and its kindred shades have been used for decorative purposes. Indeed their popularity is very recent. Time was when one occasionally saw a cream-colored wall paper spotted with small bunches of violets; pretty enough in itself but rather unthinkable on the walls of a room, but textiles in violet tones were quite unattainable. With the advent and great popularity of white enameled furniture one began to see cretonnes with designs of lavender flowers which looked very well indeed, with the shining bedsteads and chests of drawers. The harmonious association of some shades of green with lavender was a later discovery, and it was not long until it was found that a combination of white and lilac and clear yellow was a pleasant thing. And so we have gone on adding to the possibilities of its use until violet or lavender is quite the most popular of the delicate colors.

There is such a thing as using too much lavender. I do not think a room of unrelieved lavender is often successful. If by chance it is, it is one in which no expense has been spared, in which the materials used are so fine that they are very beautiful in themselves, quite independently of their surroundings. And another point is that lavender is not a good color in cheap materials. It is horrible on a distempered wall and it looks very common indeed when applied to cheap, plain textured colors. The quality of the light must be considered, as lavender is an essentially cold color needing sunshine, or at least a light suffused with sunshine, such as one gets in southeast or west rooms. Moreover it is much affected by artificial light and only those tones should be chosen which have a suggestion of red and do not turn to a dingy stone color by gas light.

In working out a violet scheme it is best to use a neutral tinted wall, although pattern may be introduced in the way of a frieze or border. There are quite a number of papers with very small all-over designs in a yellowish gray, putty color and shades a little darker, which are admirable with violet furnishings. One of them is marked off into small diamonds with a tiny ribbon in the darker tone, with knots at the points of intersection, and into it comes a two-inch border into which violet is introduced, this border to be carried around under the picture moulding. There are a number of others of the same sort, including two-toned stripes in various widths. When it comes to special patterns, it always seems rather hopeless to specify, but I have seen a very shadowy gray foliage paper with garlands of flowers in pastel shades, faint rose, violet and greenish white, which would be excellent for an upper third treatment, above a plain ingrain, papered or distempered wall, with grayish white woodwork. The ordinary, warm gray, foliage paper, which is used so much for halls is also a good background for violet, and its pattern is so little defined that it is quite possible to use a figured material in association with it. While a white wall is a very good

background for most delicate color schemes, it is not often advisable for use with violet, as it is too cold. If the warm gray is, for any reason, inadvisable, an ivory or deep cream wall is a good choice.

The floor covering is always a problem with a violet scheme. The Oriental rug never seems the right thing, though I have seen a brown Chinese wool rug used with good effect. For the average room with gray walls a gray homespun rug answers, although it is hardly suitable for a handsome room. There are a good many purple rugs in the market, but as a rule their tone is blue rather than red and they do not harmonize with carefully chosen furnishings. It is possible to get a plain velvet pile carpet in deep plum color which is a very good investment. A Wilton carpet in a very small pattern, in two tones of warm gray is good rug material, and of course if the lavender tones are combined with green a green rug or carpet is quite in order. For a bedroom it is quite possible to have a rag rug made to order in the desired tone of violet, the cost being approximately seventy-five cents a square yard. When a bedroom is in question it is as well to use a plain white straw matting for the floor covering with plain violet rugs of small size at different places. "Thread and thrums" rugs, very closely woven of woolen threads, can be ordered in any shade with darker stripes at the ends, and are very serviceable. Another possibility is having a very high colored moquette or velvet rug dyed violet. It is often possible to find such carpets in delicate gray with pale tinted flowers trailing over them, in second-hand shops, and if they are not worn, only faded or soiled, they are well worth buying, as they dye beautifully. The cost is about thirty-five cents a running yard, but the shrinkage is considerable and must be allowed for. If the violet room has much brown wood in it, a medium brown, not too yellow, is a good choice for a rug. When choosing it, bear in mind the tone of the brown Chinese wool rugs and you cannot go far astray.

Furniture for the Violet Room.

Nut brown oak, or the darker tone called Jacobean, which is a little lighter on the projecting surfaces, is the best natural wood to use with violet, which is



seldom happy with mahogany. For instance you may have a room with oak woodwork, brownish cream walls, a brown rug, and curtains and the covering of a big chair of violet Liberty velvet. Then the rest of the furniture could be of brown oak, the chairs and a settee rush seated, with some loose cushions of a brocade or a tapestry in several tones of violet. A big fern in a violet pot, desk furnishings of violet leather, perhaps a work bag of violet brocade, china painted with violets for the tea tray will help to accentuate the violet note while everything else is brown, the pictures being brown toned photographs in brown or black frames, a bit of black now and then helping wonderfully.

Enamel and Rush.

The violet room, I suppose, is apt to be a small one, usually a bedroom, or a small sitting room, although the color can be most effectively used for a drawing room, and is not inconceivable as a setting for a collection of pewter in a dining room.

But a violet bedroom can be lovely, given a cretonne of good coloring and effective design. Here the violet rag rug will be quite at home also the small patterned, warm gray wall paper of which I have already spoken. The furniture may be violet enamel, a fairly deep tone, although by no means purple. It is possible to have too much of an unusual thing like violet enamel and it is well to omit the bureau or chiffonier and have only a dressing table and bed of enamel, possibly a table, buying them in the wood and choosing pieces of rather light construction, a bedstead with spindled head and footboard. A very good bedroom table can be picked up in department stores for a dollar or a little more. It has a square top and legs that spread outward, and inclose an under shelf. Scrubbing it well with some sort of washing powder will work off the varnish and make it ready for the coats of paint and enamel.

Two coats of paint and two of enamel, using the best quality procurable of each, will give an admirable surface. Even if one puts on the paint oneself it is worth while to have a professional put on the enamel. This and the paint will probably have to be mixed to order and must be tested by artificial light.

For the rest of the furniture have one stuffed chair, and nothing is comparable to the high-backed, winged, grandfather's chair. Then you will want smaller chairs of gray wicker, two side chairs and an arm chair. Be liberal with the cretonne or printed linen, whichever you choose. Use it for sill length curtains over thin white ones, for a bedspread, for covering the big chair, for loose cushions for the wicker ones and for a scarf for the table. Use a lace cover for the dressing table through which the violet enamel will show. A pair of gilt or brass candlesticks with violet candles will give a high light to the mantel piece and a mirror in a gilt frame should hang above it, unless you fancy a bas-relief in ivory tinted plaster. Occasionally one runs across ornaments or vases in violet tones but not often, though there is always the chance.

Violet and Green.

Sometimes one finds a cretonne which combines violet and green admirably. Such a cretonne looks well with green painted furniture or with weathered green oak. In a sunny room the wall might be a light, low toned green, in a different light a warm gray or not too golden tan. The rug could be a deeper green than the furniture and the cretonne used just as in the other room suggested. There is a much wider choice for all the small things of a room when green is combined with violet than when it is used by itself, and the combination is a very charming one for which we have the authority of Dame Nature.



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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

To Remove Old Paper.

W. L. McM.—Although having received but two numbers of your magazine, I am more than interested in the way you treat of homes in building and decoration.

I am taking the liberty of asking for information as regards interior decoration in an old home about to be remodeled. Is there any way in which wall paper may be removed without discoloring the wall so as to show spots when tints or paints are applied?

At what distance from ceiling should plate rail be placed?

Should a dropped ceiling be used with plate rail for either tints or paper?

Ans.—We do not think you would find any difficulty in removing the old paper and preparing the walls for either tints or paint. The old paper must first be scraped off, then the walls thoroughly washed, so as to take off the size down to the plaster. It is not probable any stains have penetrated the size.

A plate rail should be at least 5 ft. from the floor. The ceiling should not drop the angle, as that makes too many divisions. The ceiling tint can, however, be carried down to the plate rail if desired. As for instance, if brown were used below the plate rail, then a dull yellow or deep cream could be used on wall above and on ceiling.

A Young Girl's Room.

M. E. McC.—Enclosed is a floor plan of a girl's room. I would like a suggestion as to decorating the walls. The furniture is of birch and the beds are white enameled. The wall paper is yellow, striped with small pink flowers between and has a pink rose border at the top. The woodwork is white enameled and the room is light. At present it is decorated with pennants, but I am tired of this arrangement and would like something new.

Ans.—We sympathize with "a girl of sixteen" in her wish for a pretty room. One trouble with your room is, the walls are too negative for your furniture; then, it is a small room for two beds—one a full size. It would help, if you could change the full bed for a single one.

You do not say whether the dresser, etc., are birch natural or stained mahogany—nor what sort of a floor or rug you have. These are important points.

If the dresser, etc., is mahogany stained, then leave the white beds as they are, and paint the other pieces white, three coats. Don't be startled at this—the furniture is probably not very choice. Then tint the wall a deep pink—you can kalsomine right over the paper if it is on good and tight all over. The pattern of the paper may show very indistinctly, but it will be all the better in plain, deep pink. White ceiling and white woodwork. Then put rose flowered curtains at the windows, and make cushions for your chairs of rose flowered cretonne; also cover a waist box with it. Paint the radiator the color of the wall. You must either have a rug with rose border, or you could have an old rug dyed deep pink—first discharging the old color. This will give you a dainty, pretty room with small expense.

Paper and Upholstery.

E. M. W.—"I have read with great interest your suggestions about papering and house furnishing, and am going to ask your aid to decide on papering, hangings and rugs for my colonial house."

Ans.—In your colonial house in Virginia the colonial feeling should prevail in the furnishing. There are now many



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fine reproductions of handsome old papers to be had, and this season the dealers are showing the old rich effects in "flock" or embossed velvets, so long banished from our walls. For your broad center hall with white woodwork, this style of paper in a rich deep crimson would be most effective. The sitting room on left would be agreeable in a soft lichen green, and the northeast dining room in old gold and cream. We would have rug in brown, cream and some deep old red or rose, and curtains of old gold. Sun porch with pale, golden ecru wall. The mahogany furniture will be lovely against this background. For the sitting room furniture you can have the old-fashioned sofa upholstered in a small figured tapestry, or a mohair in the pale green or rose. Some chairs could have seats of plain lichen green velvet. The ottoman may be done in either.

For North-East Rooms.

J. A. D.—We are going to redecorate the house into which we are moving. The ceilings are rather low, and the woodwork is white. The living room is dark. I have two rugs, a blue and white one and another in tans, blue, Oriental red and a good deal of black. The living room furniture is fumed oak and wicker, dining room oak, and bedroom mahogany. Would it be possible to have the woodwork made a blue green and use either a blue or green color scheme.

Ans.—In reply to your request for advice, we do not think a blue and green scheme would be a good choice for your living and dining room facing N. and E. It would be especially bad in the living room, which is, as you say, dark. Also we advise repainting the woodwork old ivory, rather than white—certainly not blue or green in these two rooms. We would use the tan, blue and red rug in dining room, with a soft tan wall and a frieze decoration in the coloring of the rug. Tan living room wall and old gold grass-cloth paper, with new rug in brown and cream and over-draperies of old gold sunfast at the windows. Cream ceiling. In bedroom the blue and white rug, blue Chambray wall with banding at top of pink roses.

We feel sure the living room in the tones suggested will give you great pleasure.

To Grain Woodwork?

B. H. S.—I am taking your offer of help in the magazine, and ask for information in the interior painting of my home. We are remodeling a one-story cottage. The reception hall and the library are to be thrown together by a colonnade with a similar opening to the dining room. The woodwork has been enameled white and needs repainting. The columns are to be put in, so are not painted. Should they be painted white? The furniture in library, will be mahogany, the walls I thought a mottled greenish grey. The dining room furniture is a dark oak. We live in a small southern town where the workmanship is medium and am afraid to trust the graining of woodwork.

Ans.—We are glad to be of service to you regarding your interior. Do not for a moment think of graining pine woodwork. The columns must be the same as the other woodwork, and we should use deep ivory throughout those rooms. You can have the doors mahogany stained, and that with color in the furnishings, rugs, draperies, etc., will be a sufficient relief. The two doors in dining room can have oak stain on the dining room side to match the furniture.

The greenish gray you speak of for library walls will be very cold and gloomy. The only way you can work in your green hangings if you have them on hand is to have very light, cheerful walls. With the ivory woodwork and mahogany, old gold walls would be delightful in library, pale soft tan in living room. There is a very charming paper for a cottage dining room —woody-gray foliage with hints of rose through it, which would be nice in that east room. An inverted porcelain bowl for electric light over the table. A ceiling shower in living room, also two side brackets, and side brackets only in library, one for table lamp can come up through the floor. In library, have amber colored glass, but in living room opalescent white. You must paint the floors—dark green will be good, especially when the rug is green. When you lay oak floors over them you can stain or have natural, as you prefer.



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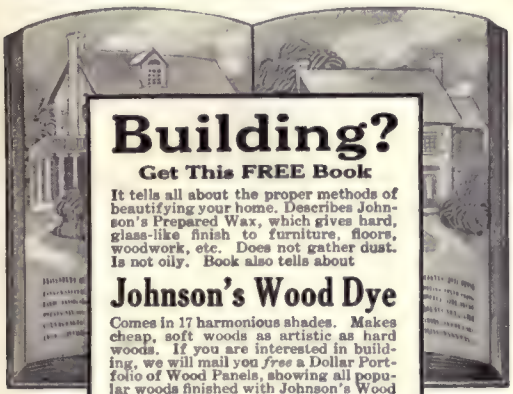
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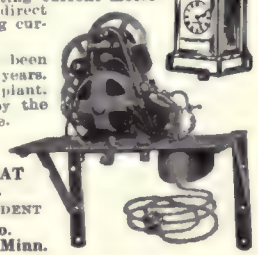
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The Mosquito, the Fly and the Closed Screen

THE day of the deadly mosquito is over. They will be with us, undoubtedly, especially in propitious seasons, for some time to come. But with the realization of their menace comes knowledge, and in some cases the utilization of that knowledge for their prevention and destruction. When federal or municipal authorities destroy their breeding places, the first step will have been taken, and the problem of the mosquito may be put under control. When it was proven that the mosquito was guilty of carrying infection and spreading an epidemic of yellow fever, and perhaps other of the summer scourges, his doom was sealed, but it will be long before his final passing. Swamps have been drained in some of the malarial regions. Breeding places have been covered with oil in places where the fevers have raged hitherto, but the farm pond, the marshes on the outskirts of the village, the pools and ravines are still prolific, especially during a season of heavy rains. If the enemies of the mosquito in any community will band together and devote a considerable amount of time and study to the problem in its local conditions, there is reason to believe that they may be freed of the pest.

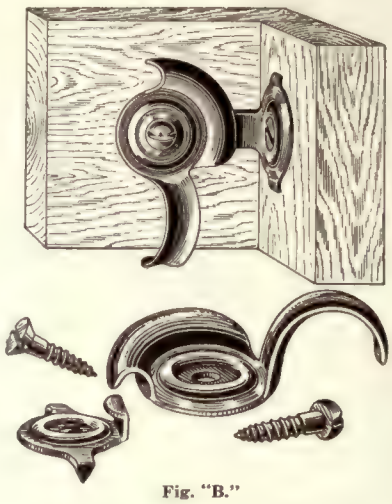


Fig. "B."

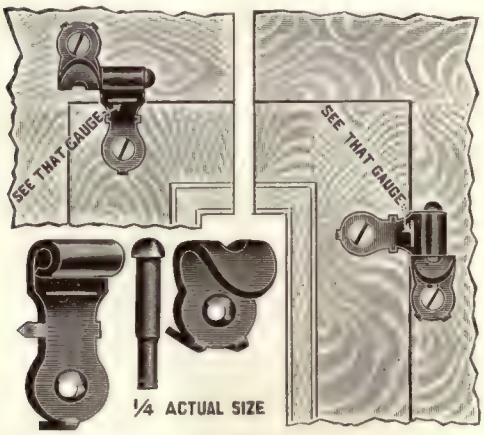


Fig. "A."

The common house fly is perhaps scarcely less of a pest than the mosquito. The housewife and the mother has learned that the friendly fly is not only unclean but dangerous, and that it is a particular menace to the small child. The slogan "Swat the fly" which was proclaimed last year with considerable effect is still in force. Considering the vast hordes of these little pests, the taking off of the individual insects seems not only a hopeless but a useless task until we realize that

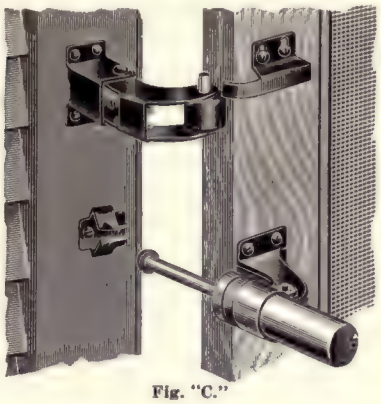


Fig. "C."

early in the fly season they are comparatively few. At that time it would be possible to kill many or most of them. Scientists tell us that the fly lives twelve days before laying any eggs; that the number of eggs laid by one fly is legion. If the fly comes under the swatter during the first ten days of its existence it becomes unnecessary to kill dozens a few weeks later.

Regardless of science and etymology both the mosquito and the fly will remain with us for a few seasons at least. Now that we know them and their ways they are vastly more repugnant to us than was the "little harmless fly" of a few years ago.

It is a very difficult matter to keep screens sufficiently tight to exclude either flies or mosquitos. Yet screens are our only final defense against them. Despite the most scrupulous care of the housewife there will be an occasional fly. A

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screen door which fits snugly one season will stick after the rains of the next spring, and refuse to close tightly, or it will rebound and stand slightly ajar, leaving a crack sufficiently wide for flies to enter. Once inside the house they seem to understand that they are safe if they gather in the sunshine on the screen, back of the sash; that they can play "fox and

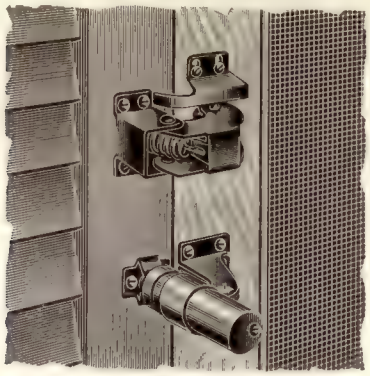


Fig. "D."

geese" with the swatter and get away almost every time. It is their place of refuge when driven from the table, from the fruit, or from the baby.

There are several screen devices which may prove a boon to the housewife in such conditions. There are a number of simple hinges on the market costing only a few cents per pair, which allow the screen to be lifted off and removed for the winter, or to hinge open if desired. The cut "A" shows one type of these hangers which may be placed either at the top of the screen or at the side, allowing it to swing accordingly. Flies may be easily driven from a screen hinged at the side and swinging out. A catch holds the screen securely when closed. Such a combination of hinge and hanger also simplifies the task of taking off the screens to wash windows during the summer as well as in removing them for the winter.

There are other devices which control the screen door when it closes, prevent its slamming, and which catch and hold it tightly closed. There are many types of such devices, elaborate or simple, operating on many principles. Cut "C" shows a screen door controller lately put on the market and for which the patents are still pending. This device consists of a spring catch that closes the door and holds it tight shut, and a miniature plunger that stops the slam. The plunger works with compressed air on the principle of a bicycle pump, and has a simple regulator, for different strength spring hinges. There is nothing to get out of order. The door catch is an ingenious, patented spring device that automatically catches the door when closing and holds it tight against the jamb. It tends to keep a door from warping or to straighten a warped door. Cut "D" shows the same combination of devices holding the door closed.

NOTE—We are indebted to the Watrous-Acme Mfg. Co. and the Dunn Mfg. Co. for the illustrations used in this article.



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200 VIEWS



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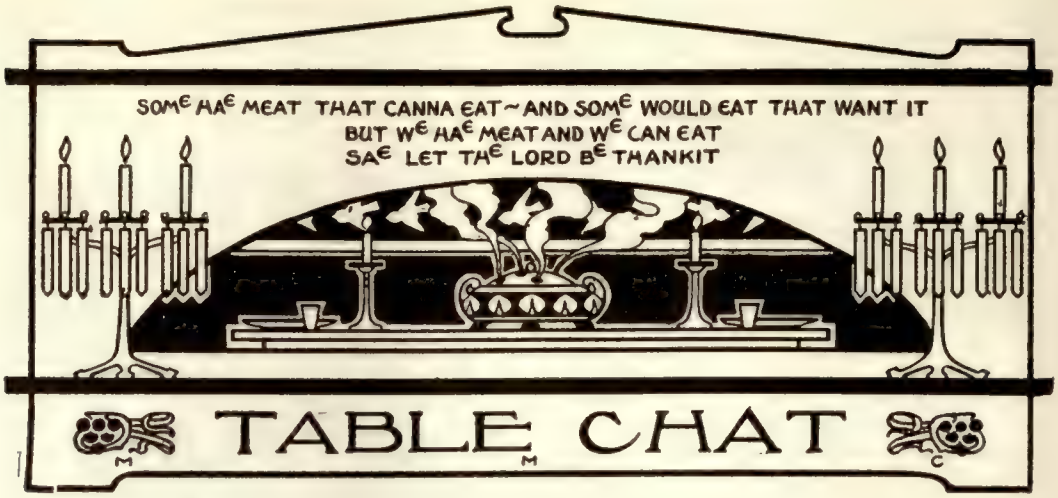
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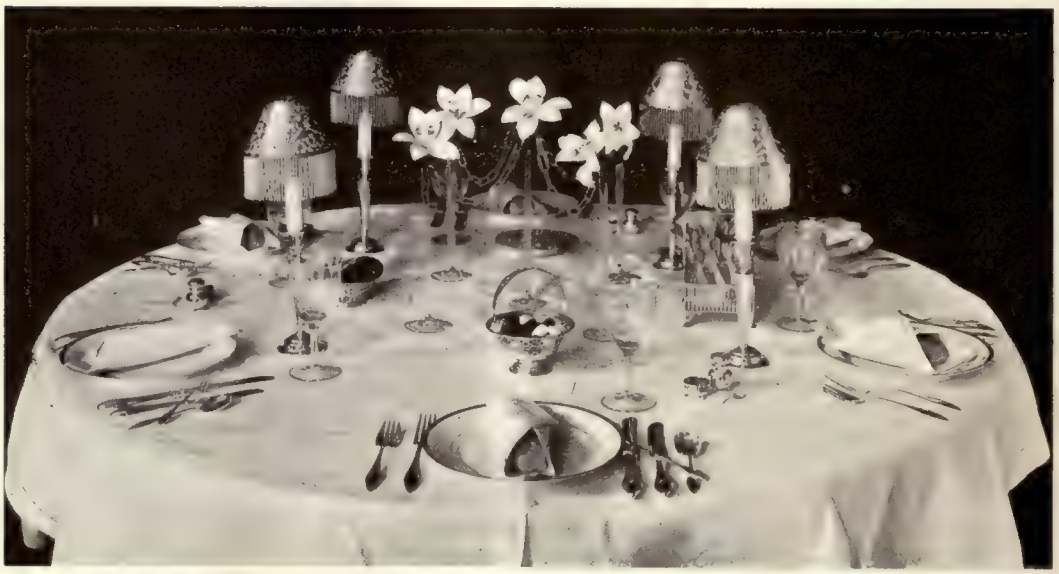
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The Late Summer Luncheon

AFTER the extreme heat of midsummer has passed and nights and mornings are fairly cool, one begins to feel like entertaining, and a luncheon is as easy as anything, especially as it may very well be cold, except for something which can be kept hot in the chafing dish, reducing effort and service. Here is a simple menu:

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We have issued a Very Interesting Catalogue on

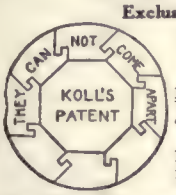
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The Waterloo Register Co.

110 and 112 Rath Street WATERLOO, IOWA

For the moulded fish use the canned, red Alaska salmon. Put aside all the skin, bone and soft pieces and cut the hard part into nicely shaped dice. Simmer the rejected pieces of each can in about a pint of water, with salt and a little onion. Strain off the liquid and add a very little mace and enough lemon juice to make it pleasantly acid. Stiffen it with gelatine in the usual way and half fill small moulds with it. When it is nearly set press the pieces of salmon down into it, lay others on top of it and fill up the mould with the remainder of the liquid. Before serving turn each mould out onto a plate, surround it with thinly sliced cucumbers and add a liberal spoonful of tartare sauce, which is merely mayonnaise with an addition of chopped capers and pickles.

In order to manage your meat course economically plan to have a fowl for dinner the day before, two if necessary, and reserve all the white meat. Cut it into dice and heat it in a rich cream sauce. If your fowl has been boiled, make the sauce with half chicken stock and half cream, otherwise use cream only. Or, if all cream is not practicable, use milk and enrich it with unsweetened evaporated milk. You may, if you like, have new potatoes cut into tiny balls, boil them and heat them in the cream with the dice of chicken.

The salad shown in our second illustration is a very pretty one. Medium sized green apples are hollowed out to make cups, lined with heart leaves of lettuce and filled with asparagus tips dressed with a white mayonnaise.

Peaches and cream require no explanation. Have them peeled the last minute and cover them closely that they may not discolor. However else you stint, have the cream rich and abundant. A simple cake, angel, lady, or silver, may be passed with the peaches. Serve the coffee which ends the luncheon in the drawing room or on the piazza.



A refreshing salad for the summer.

For the floral decorations you can not do any better than have a tall glass of nasturtiums and leaves in the center of the table, with four smaller ones at the corners. It is a great mistake to arrange nasturtiums without any of their leaves, especially as the leaves are really beautiful in themselves.

A Valuable Asset.

Speaking of table accessories, a set of five slender green glasses for flowers, the central one considerably taller than the others, is a very desirable possession. Such glasses are not specially cheap, but they are always in good taste, and are as useful in the drawing room as in the dining room.



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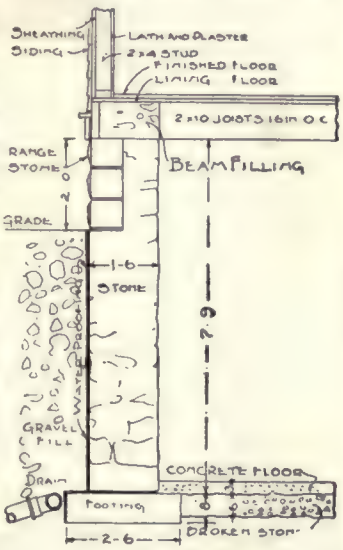
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(Fig 6)
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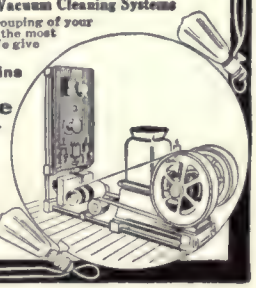
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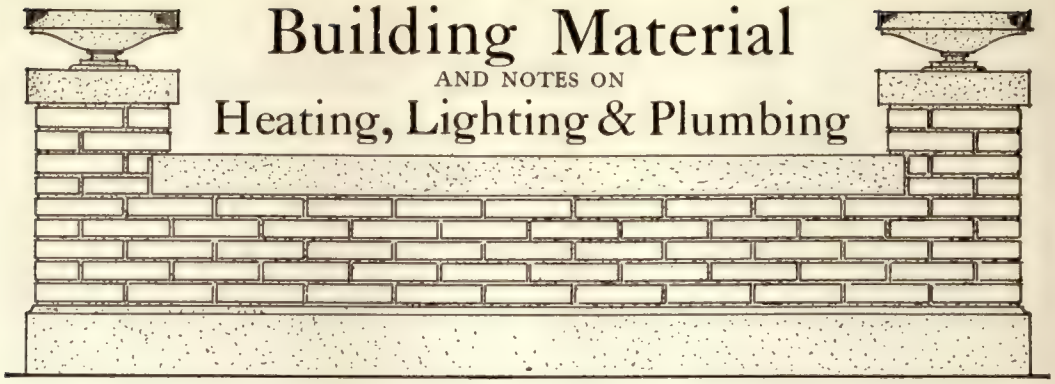
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Oil Makes Concrete Waterproof.

WHILE experimenting in an attempt to develop a non-absorbent, resilient and dustless road material, capable of withstanding the severe shearing and raveling action of automobile traffic, Logan Waller Page, director of public roads, discovered the waterproofing qualities of oil mixed concrete, which was announced two years ago. In the meantime extensive laboratory and service tests have definitely established the value of this oil mixed concrete for damp-proof construction, and a new bulletin, No. 230, has been issued by the department of agriculture. This bulletin discusses fully the preparation and use of oil mixed concrete; briefly summarized, the conclusions to be drawn from them are that the admixture of certain mineral oils in small proportions, not to exceed 10 per cent of the cement used, does not lessen the tensile strength of mortar; that the decrease in the compressive strength of mortar and concrete is not serious; that concrete mixed with oil takes much longer to set hard, perhaps twice as long, but that the increase in strength is nearly as rapid in the oil-mixed material as in the plain concrete.

The use of oil does not make the concrete impervious to heavy water pressure, but it does make it practically non-absorbent under low heads.

The value of oil-mixed concrete is said to be particularly great in the construction of basement floors and walls, watering troughs, cisterns, barns, silos and in all parts of concrete structures that are to be made damp-proof.

The oil should in no case exceed 10 per cent of the weight of the cement and for the most part 5 per cent is all that is necessary. Since a bag of cement weighs 94 pounds, 4.7 pounds of oil, or about 2½ quarts, should be added for each bag of cement used in the mixture.

The sand and cement should be first mixed with the proper amount of water into a stiff mortar, to which is added the correct amount of oil and the whole mass again thoroughly mixed until all traces of oil have disappeared. Particular care should be taken to insure that the oil is thoroughly incorporated in the mixture and the time of mixing should be practically double that when the oil is not used.

The kind of oil is also important and technical specifications are suggested in the bulletin in order to prevent the use of certain oils which might tend to impair the strength of the mortar or the concrete.

For practical use the addition of oil will be found particularly useful in the construction of basement floors and walls. Many of these now in existence are continually damp and such a condition may be remedied by the application of an oil-mixed mortar coat to the old surface. A mortar composed of one part of cement and two parts sand and containing 5 per cent of oil should be sufficiently non-absorbent for this purpose.

Watering troughs and cisterns made of oil-mixed concrete should also prove of considerable practical value in the conservation of water. In the construction of barns, where oil-mixed concrete is used, the interior will be noticeably drier than when ordinary concrete is used.

Owing to their durability, cleanliness and resistance to fire, concrete barns are

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becoming more and more popular, but they suffer from the disadvantage that during a long beating rain the side walls are inclined to absorb much moisture, which, ultimately, penetrates into the interior. The addition of oil to the extent of 5 per cent of the weight of cement in the concrete used in the side walls obviates this objection. Barn floors can also be constructed in the same way with advantage. A damp-proof floor is warmer because of the lack of evaporation from its surface and it is also more sanitary than an ordinary concrete floor because of its non-absorbent character.

Attention is called, however, to the fact that extreme care in proportioning, mixing, and placing the concrete is absolutely necessary if the addition of any waterproofing agent is to be of any value. The process of oil with concrete has been covered by a public patent so that anyone is at liberty to use it.

For Cleaning Stonework.

Frequent inquiries are made for methods of cleaning stone. The use of acids is generally to be deprecated, because they tend to injure the texture of the stone. The following suggestions are given by an English paper: "Equal parts of muriatic acid and water will remove spots of mortar on brick or stonework, but it is not the right material for cleaning stone that is begrimed from smoke and dirt. To accomplish this, apply to the surface, with a long-handled fibre brush, a strong solution of caustic solution of pearlash. Let it remain on for about fifteen minutes, then wash several times with clear water, using a stiff brush or broom for the purpose. If this is not effective enough, scrub the stone with a stiff fibre brush, using soft soap and concentrated lye and sand, allowing this to remain on the stone until nearly dry, then rinse with clear water, using a brush to remove cleaning material. Protect the hands with rubber gloves."—*Stone.*

Experiment Before Staining.

When using stains, a plan which often saves much disappointment is to experiment first on a few pieces of wood similar to that on the job, till the required result is attained before proceeding with the entire job. Allow the samples to dry before judging, as the drying may alter the tone.

An Economy to Repaint.

Every home owner desires an attractive house, one that will appear well, will have a charm at the beginning and will not lose it with years of use; a house that will please his neighbors as well as himself, and that will add to the beauty and attractiveness of the community in which he lives.

It is always an economy to repaint a house when it begins to show signs of paint decay. The failing is due to the effect of the sun and the weather on the oil. It will save injury to the house to repaint, outside and inside, and to use only the best material, for "the best of its kind is the most economical."

When preparing to paint the exterior of the house, very careful attention should be given to the condition of the wood or brick, as well as to the weather. Painting should not be done when the walls are wet. In damp or frosty weather paint should not be put on early in the morning, as the moisture covers the surface and will cause the paint to blister and perhaps to "crawl."

Mile-a-Minute Concrete Work.

A rush job out in Ohio required some novel expedients to secure desired results. At 3 p. m., January 9, a contract was awarded for the erection of a one-story structure 90′ x 202′ in size, with two monitors, for an acid building for a storage battery company. It was stipulated that the building should be completed by February 1. Considerable concrete was involved and on account of this and to guard against the effects of adverse weather, a circus tent 150′ x 350′ was put over the site. Construction was begun at 6 a. m., January 10, with a force of 250 men and in 16 days the entire job was completed, thus enabling the lucky contractor to establish a construction record for "dead-of-winter" work. Not only is the ingenuity of using a tent to make speed possible in construction to be highly commended, but so far as the construction itself is concerned, the advantages of uniform temperatures in winter concrete construction cannot be overestimated.—*Concrete-Cement Age.*



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what the cost of first appearance, your satisfaction and your money's worth are *finally* measured by the Quality of the Fixtures that go into your bath room.

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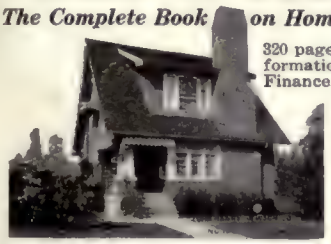
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Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

A Full Timber Construction.

J. S.—"I wish to build a house about 16x22 and, being in the country, to build it as cheap and as durable as possible. There is some good timber about but not of sufficient size to make a log house. I was thinking of hewing 2 sides of the log to make it 6 inches through, and making the frame of those logs. The uprights would make a wall 6 inch thick, thereto being nailed a scantling 2x4 inches to receive on the outside metal lath and on the inside wooden lath, leaving the timbers exposed on the outside. Would this not be rigid enough; also warmer than a frame building?"

Ans.—Replying to your inquiry about character of construction for your proposed country home, we would answer "Yes." With the log construction as you have outlined you should have a perfectly rigid and firm structure, built as you have described and it ought to be easily warmed.

If you build this house as you now describe, we would be very much interested to see a picture of it when completed and hope you may find the opportunity of sending us a photograph of the same accompanied by a little write-up or description of your experience in building it. It is a house that would be somewhat out of the ordinary and I am sure would prove of a good deal of interest to the readers of Keith's Magazine.

Finish for Hardwood Floors.

F. H. M.—We wish to secure for our hardwood floors the most beautiful and durable finish that it is possible to obtain.

Ans.—Hardwood floors may be given a beautiful finish either by waxing or by applying a good floor varnish. If floors are waxed they must be given constant care, when it is possible to keep them in beautiful condition. A good floor varnish makes an excellent finish and is impervious to dust.

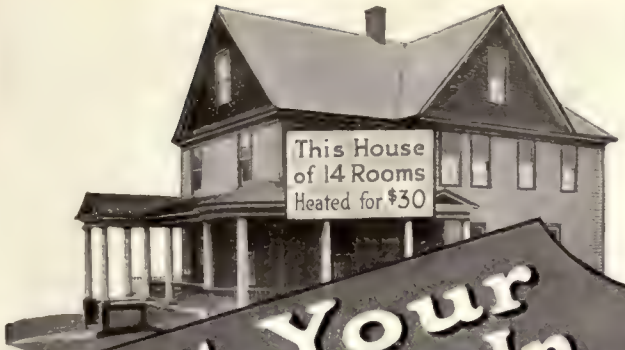
To finish an oak floor in the natural finish, which we presume is what you will want, we recommend a coat of good paste wood filler of the desired shade and three coats of floor varnish of a standard make, while if the wood is not of oak or similar open grain, but is of a close grain such as maple, then the paste wood filler should not be applied, and three coats of floor varnish applied according to instructions given by the manufacturers is the only treatment necessary.

Lot Level.

E. C. R.—I want to ask a question relative to my lot line and the facing of the house for best results. The lot faces east and has an elevation at the front of about 5 feet above the sidewalk level. I do not care for a steep bank, and my neighbor on the north may not care to cut to the grade I may establish for my lawn. What am I to do to get the best results from the situation?

Ans.—In reply to your letter regarding your lot, which lies, as I understand it, 5 feet above sidewalk level and is about the same as the lots north of you, whereas your neighbor on the south is about 2 feet below the natural level of your lot, would say that in my judgment I would never lower my lot if I were you. Five feet above the street is not one bit too much. I would simply terrace down onto the two feet lower level of my neighbor on the south.

As for the approach, if you can build a neat brick wall about three feet high running across the front, with a very gentle terrace sloping down to this wall.



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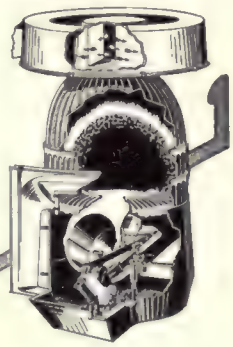
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WOODS AND HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

The Passing of the Forest Primeval.

WOOD has been so abundant in the United States, and so cheap, that it has been used for a multitude of temporary purposes, often for purposes for which other products are better suited. Through this and other causes wood has been discredited. The idea of its being used as a temporary expedient, to be replaced later by a more costly material, has been overemphasized. Added to this is the fact that in putting new materials on the market they have been widely advertised, to bring them into especial prominence. The beauty and real desirability of wood has fallen into the background.

Another stage of economic development has now been reached. Wood is taking its place as one of the finer materials, and is being used for purposes for which it is preeminently fitted. So much has been said about the growing scarcity of wood that people are taking the statement as an absolute rather than a relative one. People do not burn great trees now to get them off the ground that they want to turn into grain fields as they did in pioneer days, nor split them into rails for building fences. Information from authentic sources seems to show that for all uses to which wood is especially fitted, the possible supply of wood is quite sufficient.

The time is past when the price was controlled in part by the fact that trees were cumbering good ground, or that timber land was the gift of the government. It is controlled by the regular economic forces, chiefly the labor in getting it out, and transportation, with a small margin for the land. Practically, a great difficulty seems to lie in bridging the span between the small man who has cut the logs on his place and the big concern which puts lumber on the market. There is small incentive for the owner of the smaller timber plots to get them into such condition that they yield a more or less constant supply.

Peculiar Advantages of Wood

The characteristic qualities of wood are such that we can scarcely conceive of the possibility of banishing wood from our immediate and personal surroundings. There is always a chill in the thought of "marble halls." We have occasionally seen beautiful floors of Gruby tile in a living room, but most of us prefer a hard wood. Furniture made of any other material than wood does not seem good to us. We accept reed and willow, but they, of course, are wood.

The general availability of wood, its strength and lightness, together with the ease with which it is worked, makes it a material unique in itself. In addition to this it is a non-conductor of heat and electricity, as compared with metal; and of moisture as compared with brick and concrete. Nor does it contract and expand constantly with the changes in temperature.

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When people learn to know and love the varieties of wood for their own beauty they will not allow the surface to be disfigured by many of the stains and finishes now used as a matter of course.

Lumber Waste.

It is stated that lumbermen and others have shown recently that only 40 per cent of the trees cut in the forests of this country are used for lumber. In Germany about 95 per cent of every tree grown in the forests is used, thus allowing practically nothing to go to waste.—*Building Age.*

A Wood-Waste Exchange.

The latest business-aid service instituted by the government is a wood-waste exchange. It enables lumbermen and manufacturers to utilize the waste, from the various wood-using industries, to mutual advantage, and must eventually effect a large saving in forest materials as well as in money.

The wood-waste exchange is being conducted by the forest service of the department of agriculture. More than forty manufacturers of wooden articles already have asked to be listed as having certain kinds of waste wood for sale, or as desiring to obtain their raw material in the rough or in semi-finished form from mill or factory waste.

Twice a month the exchange sends out a circular headed, "Opportunities to Buy Waste," containing the names and addresses of factories having waste wood for sale, with exact information as to species, sizes, forms and quantities. Similarly, another circular headed, "Opportunities to Sell Waste," gives the specific requirements of wood-using plants which desire to buy waste material.

One of the first waste problems solved has been that of a furniture maker in Michigan who wrote to the forest service asking how to dispose of sugar maple blocks and sticks which were cut off in the process of furniture making and which he had been selling merely as fuel. Samples were obtained from him and the forest service then located a scrubbing brush manufacturer who used small maple blocks for brush backs. The result was that the furniture maker was enabled to sell his waste at a much higher price than it had brought as firewood, while the brush maker was enabled to buy brush-back material in suitable sizes at a much lower figure than it had been costing him to buy maple lumber and cut it up.

Firms which have been put in touch with each other through the exchange are expected to notify the forest service when their requirements have been met; then their names are removed from the lists. In this way several concerns which early took advantage of the plan have dropped off the lists. As the manufacturers learn of the wood-waste exchange and the possibilities of its service the lists are steadily growing.

Kind of Logs for Pergola.

H. J. W.—I want some information about pergolas or arbors, the kind of wood to use in such construction.

I also want to get some information about log pergolas. What logs to use and how to treat them. Would appreciate any information.

Ans.—In designing a pergola the architectural location of the house should be taken into account. If the pergola is to be made of millwork it would be well to specify cypress, redwood or white pine. If a semi-rustic effect is wanted use large size cedar posts for the uprights and, also, for the crosspieces. The principal working difficulty is the extra time and care required to join the members of the frame.

For log bungalows nothing in the north will surpass cedar and tamarack. The builder can bank on either one of them.



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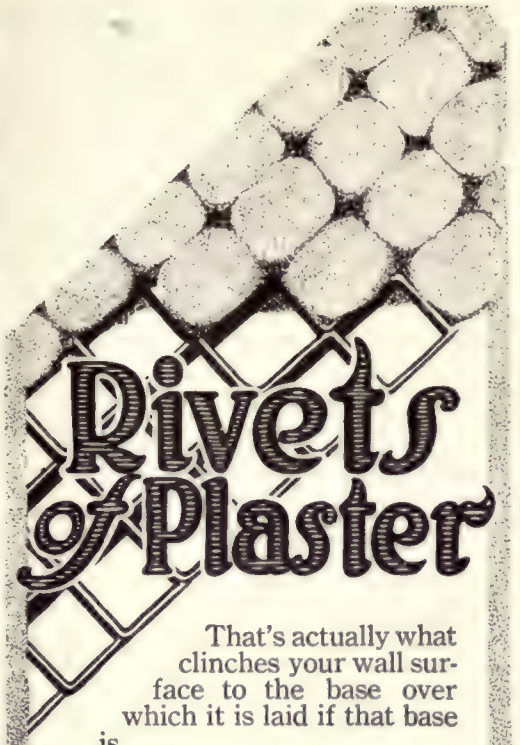
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SPLINTERS AND SHAVINGS

For the Camping Outfit.

WHETHER one camps for a week or a month in the mountains or in the northern woods, or if one only drives thirty miles in the machine and gets dinner in the woods with a long day there, some kind of a camping outfit becomes a convenience if not a necessity. This is especially true of cooking utensils. Here are a few suggestions which will allow tin pails, which you must carry, to do double service. We make acknowledgment to J. D. C. in the Country Gentleman:

"If you have an empty lard pail—the ten-pound size—select a tin cover that will fit inside it about half way down. Punch larger holes in this cover, and you have a small but very useful steamer. The regular cover of the lard pail will need to have one or two holes punched in it in order to allow some of the steam to escape. When this steamer is over the fire, remove the handle, which is easily done by pulling first one side and then the other from the holes into which it is fitted. When you wish to lift the steamer from the fire the handle is as easily slipped back into place. If you do not have a tin cover that will fit down into the pail, try a small colander."

A Home-Made Fireless Cooker

You can prepare your dinner before you start on a long trip and carry it with you, keeping it moderately hot, in a fireless cooker which you can make.

"Large covered lard pails that hold, I believe, a hundred pounds, and may be purchased for a small sum from the grocer. One of these can also be readily converted into a fireless cooker by being lined first with asbestos or, lacking that, with several thicknesses of newspaper, then filled with hay packed in tightly, a nest being made in the middle for the pail, which should be supplied with a tightly fitted cover. Line the nest and cover the top of the hay with muslin, leaving room above all for a thick cushion of hay, with newspapers top and bottom. When in use cover all with a thick blanket. Such a cooker is useful anywhere, but is especially fine for camping."

These large pails also make very useful bread and cake boxes.

"Sample-size talcum powder boxes make attractive and serviceable salt and pepper shakers for camping or picnicking, as the perforations at the top may be closed when not in use."

Housing.

How to construct houses so that the occupants will not be robbed of their natural right to light and air and still be warm in winter and cool in summer is the great problem, says the National Real Estate Journal.

Before the days of glass, houses were not only dark in the daytime, but adequate ventilation was impossible.

A brilliant prophecy for the future came from Berlin before the dreadful days of the war, which we quote, as it may furnish inspiration to the home-builder.

Paul Scheerbart, the well-known German writer, prophesies that the architecture of the future will be of glass, and that the world will be inhabited by a happy race living under the good influence of sunlight.

"The houses will be of glass," he says, "with all wood eliminated. The furniture will be of wrought iron, and the framework of the buildings will be of iron, rustproof, while the walls will be of double glass, to insure warmth, and of many colors, in order to baffle inquisitive persons.

"The buildings will be heated by electricity, and the walls decorated in tiffany majolica effects.

"The porch of every home will have three sides of glass, and there will be glass garden houses, where one may live in the sunshine by day and the starlight by night."



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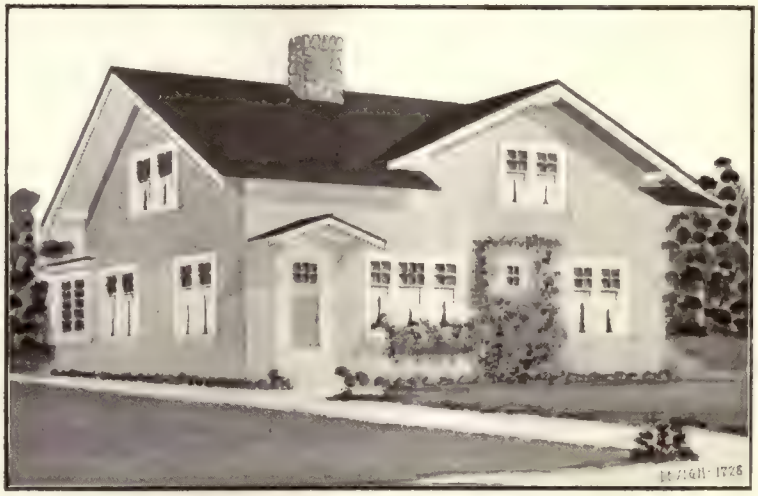
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New Booklets and Trade Notes

A MAN knows all about how much fuel he puts into his furnace, but as to how much heat he gets out of it and how much he ought to get he knows very little.

"The first step in designing a heating system for a building is to determine the probable heat loss per hour in the coldest weather, after which an equipment should be provided of sufficient heating power to offset this loss when working at its normal capacity," and to consider the quality of the air supplied.

A series of books on Power, Heating and Ventilation, by Charles L. Hubbard, have just been published by McGraw-Hill Book Company. While the work is technical, and the first part treats of steam power plants, the second part covers the subject of heating and ventilation as applied to all classes of buildings, from the small furnace-heated dwelling to structures of large size, and the fundamental elements of the subject are quite fully treated.

It takes up heat losses, ventilation, the various types of furnaces and boilers with the especial reasons and conditions for each, including electric heating; fans; and the devices for controlling the plants. In addition it gives a chapter on the proper care and management of heating and ventilating plants. If the householder knew more of these things he would be more comfortable with reduced coal bills.

* * *

The modern boy on a fifty-foot lot is the subject of "Bill's School and Mine," a book of interest to other fathers who grew up in the open fields and woods. It is the story of William Suddards Franklin, published by Franklin, Macnutt & Charles.

"And on Saturdays we boys roamed over the prairies picking wild flowers, playing wild plays and dreaming wild dreams—children's dreams. Do you suppose that little Bill dreams such dreams in a fifty-foot lot with only his mother's flowers in the window pots to teach him the great mystery of life?"

"Bill's school seems real enough, but his play and his work seem rather empty. Of course Bill cannot have the fringe of a million square miles of wild buffalo range for his out-of-doors."

"The Land of Out-of-Doors! What irony there is in such glowing phrase to city boys like Bill!"

"Scarcely more than a generation ago every American boy came under the spell of hunting and fishing, the most powerful incitement to laborious days and the most potent of all anodynes for bodily discomfort and hardship; and the problem of educational play is to a great extent the problem of finding a substitute for the lure of the wild for the energizing of play."

* * *

"With the painful recollection of many occasions on which the author has remembered things to be done just too late to do them," The Country Home, Month by Month, a book of 236 pages, has been prepared by Edward Irving Farrington. It is more than a monthly reminder for it gives directions in detail for many important things necessary to be done, when living in the country, with especial reference to the poultry, the garden, and the bees.

The appendix gives a list of the government experiment stations, and suggests taking advantage of their helpfulness. There are planting tables for flowers and vegetables, analyses of fertilizers, spraying calendars, and information regarding poultry. It is published by Laird and Lee, Inc., Chicago.



KEITH'S MAGAZINE ON HOME BUILDING



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A dream come true.

KEITH'S MAGAZINE

VOL. XXXIV SEPTEMBER, 1915 No. 3

As They Build in California

E. C. Bartholomew

THOSE who have studied the old California Missions and their predecessors, the mission churches of Mexico, seem to feel that the Californian climate and conditions strongly influenced the mission builders in the variations which they made from the Mexican types of building. It is with a curious sensation that one pauses to remember the old Spanish civilization which centered in Mexico City at the beginning of the nineteenth century, whence came the old mission builders and the early life of California. One of the most notable features of the Missions of California, especially as distinguished from those of Texas and work further south, is the low wide spreading eaves almost invariably found in these buildings, giving the comforting sense of relief from the heat of the noonday sun as well as the brilliancy of sunshine and strong shadows. This is a feature which the home builders have accepted and made quite their own. Perhaps this is the reason the bungalow is so popular in California. On the other hand, possibly the bungalow as we know it, has been evolved and de-



The wide spreading eaves give a sense of comfort.

veloped in the process of adapting the very wide low eaves to the small dwelling. Nowhere has it been so well done perhaps as in Pasadena.

In a mild climate where it is not necessary to enclose and heat the space under the floors, the processes of building meet very different conditions. Without excavations and deep foundation walls, a building may ramble about at the pleasure of the owner, without adding enormously to the expense. Hence we find the houses all on one floor, wide, and low lying, with wide projecting eaves coming down close to the windows.

Where picturesque effects are especially sought, the wide shingles or shakes combine very effectively with other materials, giving a good texture to the surface.

Casement windows are greatly favored in California because, for one reason they open the whole space, and so are twice as effective as double hung sash which only open the space of one sash. In some localities the casements open out and in other places they all seem to be made to open in. Curtains and shades can be easily arranged for either condition. Casement windows certainly are picturesque, and perhaps especially so in a tropical luxuriant vegetation.



Casements open the whole window space.

Two views are here given of one of the bungalows on a newly laid out tract in Pasadena. While the buildings of this group are not duplicated, they are designed to be seen as a group. In this bungalow cobble stones are used in an interesting way to buttress the porch piers and chimney. The chimney itself has been studied as one of the features of the house in quite a satisfactory way. Definite facts about a completed building always have a certain interest. Note has



A bungalow in Pasadena.

been given us that this bungalow was built complete including a cement garage and all walks and drive for $5,200. It is equipped with a gas furnace, hot water heater, lighting fixtures, etc. This house, of course, could not be duplicated in a colder climate at this price.

In climates where the summer heat is intense low roofs are feared on account of the heated ceilings. Even in California a house of this type is generally protected by a complete circulation of the air under the roofs. If you notice carefully you will generally see the the louvres,—a series of overlapping slats,—fitted into the peak of the gables. These overlapping slats are so set as to give a free circulation of the air while protecting from rain and storm. When set very close under wide projecting eaves there is very little danger from rain, but they should be screened to keep out squirrels, birds or other intruders. In cold climates they are fitted with solid wood doors which may be closed back of the louvres. Registers in the ceilings of the rooms prevents the hot air from gathering and remaining at the ceilings.

Another feature of the California house which either has not been appreciated elsewhere, or is not suited to other climate and conditions, is the "cold closet." This term implies a very definite thing to the builder and to the housewife in California. It is built almost like a good sized flue, and somewhat on the same principle. It is the draft which keeps the cupboard cool. It should be built on an inside partition, though a north wall would do. It is about the size of a refrigerator on the inside—as it serves a similar purpose. There must be a free circulation of the air from the ground,—not a cement floor, so they in-



A house all on one floor.



A colonnade of white posts on either side of the patio.

sist, but from the earth,—through the entire height of the house to the roof, with a direct connection to the outside, generally carried between the rafters. Cupboard doors, generally from the kitchen, open this cold closet which is fitted with shelves of a heavy wire grating. It is screened above and below the shelves, all of the shelving and screens being removable. There is a screened opening near the ground for ventilation. The cupboard remains at about the temperature of an ordinary cement cellar. If it gets warm the housewife pours a little cold water onto the earth at the bottom, which seems to be all that is necessary to operate this economical and sanitary refrigerating system.

In California it does not really matter what kind of a house one may have, vines, shrubbery and flowers will make it beautiful. Such slight effort is so well repaid that even the easy-going dweller in a semi-tropical land is encouraged to his best endeavor. At the same time the setting is worthy of the beautiful picture, and we often see the small, unpretentious house with its tile roofs and carefully worked out details. The patio, or small court which the house partly surrounds, is often flanked by a colonnade, perhaps with white cement posts, which turns the patio into an outdoor living room. It is secluded from the street, shaded and cool; the very heart of the house and its hospitality.

In some ways California has escaped the bondage of the older, more commercial "effete East," and has made beauty an asset of itself. Beauty has a commercial standing, and so has a respect paid to it which is not accorded so readily elsewhere. This fact is reflected even in the smallest of buildings.

Two Women Architects

Virginia Shortridge

Architecture is one of the newer professions to be undertaken by women, and their work has been given very little publicity. The training required is long and arduous, and the return promised is in the pleasure in the work rather than in especial pecuniary profits. Nevertheless there are women architects in all parts of the country; women who have had the best training America affords, and a few who have had the much prized training in the great French school at Paris. They are working in a steady, quiet way and, especially in the beginning of her career, each woman has worked under strong handicaps. The building of homes is so essentially woman's work, and the difficulties which have handicapped these pioneer women are so largely psychological that they must gradually disappear with the progress of the work.

The article which follows is divided somewhat arbitrarily into two parts, the second of which will appear in a following number. Miss Howe received her training as an architect at the Massachusetts Institute of Technology, supplemented by travel and study abroad.—*Editor.*

MANY of the most beautiful buildings in the world were built under the guidance of many architects. It is a well recognized fact that more minds than one can contribute to the design of a building, to its great and lasting benefit, as may be witnessed by the fine old English houses, and great buildings of all countries.

Perhaps this may account in some measure for the charm of this Cambridge house to those who visit it, and Miss Howe, of Boston, may exemplify the same fact. The house was built about twenty years ago by that famous firm of architects, Messrs. Cram, Goodhue and Ferguson, who have revived the beautiful English Gothic and given us such poems in stone. Obedient to the courteous unwritten law, Miss Howe has destroyed the exterior line as little as possible in framing her enlargement, and has achieved what is termed a very perfect style of cottage architecture.

If all French architecture from the early times shows the artistic genius of the race, and English architecture shows intelligence and capacity of absorbing and appropriating what has been creditably done by other nations, then our American architects are following their English brothers



A charming house in Cambridge.



There is character in the gables.

and making in various localities very artistic and land-suitable houses—with a new light in housewifely conveniences and a deep appreciation of the value of fresh air.

The original kitchen and butler's pantry in this house have been made into a roomy living room, with large fireplace, and opposite are broad French doors with small panes of glass, giving out onto a piazza overlooking a pretty garden. The new kitchen was built in a new wing. Between it and the dining room is placed a butler's pantry, with shelves and cupboards, a plate warmer and, concealed by a small door, are racks which hold the dish-towels, out of sight, but where they are dried by the electricity which is turned on for the plate rack—and above, on both sides, stretching quite three feet either side of the copper lined dish sink, is the dish rest or counter, also copper covered. The bowl is just the right height to avoid the leaning over in washing the dishes. Another of Miss Howe's practical aids for the waitress is a strong board placed un-



The living room invites one to rest and read.



This Cambridge house has a charming group of windows and cupboards.

der the shelves which can be drawn out to stand on when dishes are needed which are too high to reach with ease.

From the pantry one is brought into the very charming dining room where about four feet of bay makes a suitable place for the sideboard and the little leaded panes add a quaint picturesqueness enhanced by the tendrils of caressing vines.

George William Curtis has said that



The other end of the room.



This pretty play room is for the grown-ups.

every man may be in essence the owner of the land he sees, even though he actually owns not a foot of it—so the charming picture this house presents in its luxuriant setting of trees and bushes gives much to the passerby—as he strolls along.

Strolling, by the way, is done now and again even if this is an age of quick motion, above us, beneath us, and by us—accelerating our every day steps somewhat startlingly at times. It is possible to give a little of the way to Romance, if "tempered with practicality." One dreams a dream and it comes true, and the pretty play room for grown-ups may be classed in that variety. For this room on the topmost floor of another Cambridge house is the out-grown child's play-room, descended now to the cosy corner play-room of the elders. Does it not suggest happy, snug hours full of story and good cheer,—and much jollity—with its wood fire, its comfortable corners, and its mysterious manner of concealing the door knob, so that it can only be opened by a trick-button?

Houses are somewhat like shrubs. It is almost impossible to build them in a style indigenous alone to America. The lilac comes from Persia and the forsythia from China, although named for a Scotch gardener. If the Georgian period is quite as truly colonial, yet they are both after English ways and this wayside cottage certainly suggests the Devonshire lanes more than the practical architecture of a New England farm house.



This cottage at Seal Harbor, Maine, suggests Devonshire lanes.

Miss Howe believes that clients are more willing to give an alteration to a woman to do, in changing a house, because the making the best of not too perfect situations is a well acknowledged feminine quality.

Men, as clients, are less exacting in the matter of their rooms than women, because their demands, besides being simpler, are uncomplicated by the feminine tendency to want things because other people have them, rather than to have things because they are wanted, and so men are less changeable when once they are prepared to build.



With its wood fire and comfortable corners.

An Attractive Rustic Pergola

THE rustic pergola shown in the picture, has for its support four octagonal cinder-concrete columns surmounted by undressed timber; in fact the picture shows them to be just as they were cut in the woods.

The arbor is 8x12 feet. The columns are 7½ feet high, 2 feet at the base and 18 inches at the top. Each has a foundation of concrete 2 feet 6 inches each way—in other words, a concrete footing of that dimension. A square form of boards was erected and corner pieces inserted to form the octagon. It was intended to give the columns a finishing coat of plaster, but they looked so well in their crude state that it was never applied.

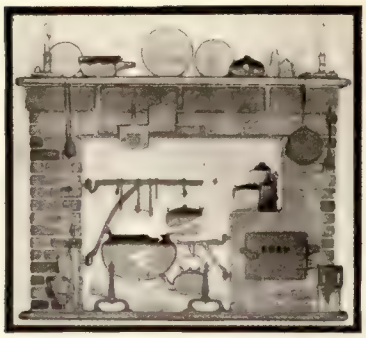


Fine for a country home.

Simple designs of this type compare favorably with the most costly and ornate conceptions, and are made at greatly reduced cost. These columns take their place in the landscape with the unobtrusiveness of a tree, while their rough surface is better adapted to the growing of vines than columns possessing a smooth surface. In fact, the columns on the world-famous terrace at Amalfi are even more simple than these octagonal forms.

The concrete could be mixed in the proportion of 1 part Portland cement, 2 parts sand and 4 parts stone or screened gravel, as cinders are not always available. Cinders do not mean ashes, so it would be better to use sand or gravel.

The work here shown was executed in Beverly, N. J., at the suburban home of J. Fletcher Street, a Philadelphia architect. —*Building Age.*



THE KITCHEN



A Woman's Workshop

Edith M. Jones

This magazine is fortunate in securing for a series of articles, one of the few kitchen specialists in the country. Mrs. Jones has the training which fits her for planning a kitchen down to the minutest details so that it fits the conditions of the individual housewife. KEITH'S will publish this series of articles commencing with this current month and any of our readers will be privileged to call on this Department for assistance in the planning and securing of a model kitchen. The photographs accompanying this first number show some of the work which Mrs. Jones has so successfully carried out.—*Editor.*

WHEN we hear our grandmothers tell of the good things that were made in the old New England kitchens it sometimes makes us doubt if modern equipment or change of method is so necessary after all. But we too often forget that conditions and requirements have changed in every way since our grandmother's time. Then each kitchen with its ample fresh air and sunshine was a manufacturing plant or factory caring for the products of the farm and the cool cellars made storage a very simple problem. But we are living now in crowded and congested cities and the problems have changed accordingly. A wonderful revolution in housekeeping has taken place. Many, many of the industries have been transferred to factories, the lives of women have been emancipated from much heavy work and housekeeping today represents greater problems and responsibilities along economic lines. Nowadays buying instead of manufacturing is the important thing for the housewife to consider. In other words housekeeping has become a business and as the activities have progressed so our workshops and methods must necessarily manifest progress. Every profession or business is tributary to homemaking, hence all exit mainly for the home because homemaking is the supreme profession. It is happiest when understood and no profession offers so wide a range of knowledge, activity or interesting research.

If a man is about to go into business, one of his first questions naturally would be "Where will I locate? What sort of a store or office can I get and how can I fit it up to best meet my business needs?" So when a woman plans her home she must as carefully consider her kitchen, for this important room is to be the workshop and office of the business of her home. Here the housewife or her assistants will spend a large part of their time. And no detail is too small for careful consideration if time and thought can make the

work and workers more comfortable. The equipment must not only be selected carefully but the relationship of the different parts of the equipment must be given much consideration, for in this arrangement lies the secret of the efficient kitchen.

A girl who has been employed in an office before her marriage, who has kept everything in systematic order, and thus has been enabled to do more efficient work, seldom thinks it is possible to follow the same ideas in her kitchen after her marriage. But I am constantly reminded that as a man in business is careful to see that his offices are provided with the necessary equipment so the homemaker owes it to herself to look after her workshop with the same idea of efficiency. The kitchen is woman's natural workshop and it is noticeable wherever women's intelligence and enthusiasm have asserted themselves the kitchens express more and more comfort, efficiency and beauty.

The business man for instance would not tolerate the lack of efficiency in his place of business that the housekeeper accepts as a matter of course. Women have accepted inconvenience with characteristic endurance because it has seemed economical and necessary, but the enormous waste of time and courage is revealed by a glance into the office of the successful business man. This model of compactness bears its lesson and the condensed convenience of the dining car kitchen is a revelation. So as the business man takes advantage of every bit of office equipment to meet the demands of the business world—women in their workshops must take advantage of every time and energy-saving device and study to group these appliances so that the industrial centers



Conveniences a modern housewife may have.

of the home may be judged by the modern watchword of success namely, "conservation and efficiency."

Again let us turn to the business world for a moment and we find every successful business today is built upon a well thought out organization. Whether the business requires many or few people to carry on the work, the organization is permanent and must be thought out by the one who has the business in charge. The head of the business must understand every point of his business even though he has able assistants who carry on the carefully thought out plans. He also must have all the necessary equipment in his offices to carry on the work in the best possible way. As the business man manages his business through an organization and carefully selected equipment so the successful housewife follows his example in as carefully systematizing and equiping her workshop.



A pantry with a double sink—one for washing and one for draining dishes.

House planning and homemaking are sister terms and cover two of the most absorbingly interesting activities of human life. Throughout all time architecture has been the most universal of all arts in its appeal. Of all building the home claims the most vital personal meaning. Who has not dreamed of such a home as he or she would like to have, and yet how often when these dreams come true we find that we have given the first consideration to the drawing room, while the kitchen, laundry, closets, etc., the most vital rooms of the whole house, have been neglected. This is especially unfortunate because the study of domestic architecture is full of secrets which every woman who is a homemaker knows how best to plan for herself.

Just a word in regard to the work of planning these kitchens. Every architect or every housewife could do it if they gave it their time and earnest consideration, but many are glad to avail themselves of the kitchen specialist whose work it is to share her experience and time in this much needed field of architecture. Realizing the social and economic demands of the day, and with a sincere desire to be of service in the world, the specialists along the line are aiming to place housekeeping on a business basis and to make the workshop of the modern home as efficient as the office of the successful business man.

Typical Colonial Entrances



The Shreve house has a typical Colonial entrance.

THE work of the early colonial builders is one of the powerful influences in a large part of the building that is done today. The modern builder can not do his work satisfactorily without some knowledge of the colonial types, and the home builder asks "what kind of windows to use with his colonial entrance," and "how to arrange the side lights." A feeling of dignity and of leisure always pervades the best of these types of old colonial work. It is

disclosed in the carefully worked out details, the subtle curves of the mouldings, the variety of the dentile courses and the key mouldings, as well as in the more noticeable features, especially in the slender and delicately detailed "orders" with generally the full classic entablature, but all so daintily designed that it is eminently appropriate for wood. This work could only have been designed and appreciated by leisurely people in easy circumstances.

The woodwork was almost invariably painted white in the colonial work either of the North or of the South, except in the case of the more elaborate houses where mahogany was used for interior work. The reason for this was very evident. The native wood used was a soft pine, and it was painted white, to bring out the delicacy and beauty of the details. Have you ever noticed how clumsy a coarse moulding looks when it is painted white; that a simple board with square edges generally looks better than a moulding that is not well designed? Then notice a moulding with small faces and delicate curves, such as are found in colonial work, when it is painted anything but white and you will see that the fine shadow lines lose their values, and the whole moulding becomes ordinary.

If the colonial householder imported wood, he brought over from the old country the most beautiful wood he could get, so mahogany is used in much of the more elaborate work. The combination of mahogany and white is wonderfully effective, especially as a background for the beautiful old mahogany furniture. The stair rail was very often mahogany even when the other woodwork was white—again for a very good reason. White paint, or paint of any kind would not stand the usage given the hand rail. Our forefathers were very provident people.

A portico very generally protected the colonial entrance. Sometimes it was semi-circular, but more often it was square. One of the classic "orders" was used for the design of the pillars of the portico and also for the entrance. The door itself was usually wide, sometimes made of three panels, two of which hinged togther in opening. Side lights on either side of the door and generally an oval fan light over the whole, made the entrance proper, and this usually opened into a wide hall which extended the whole width of the house, with a glass door at the farther end. The entrance expressed the wide hospitality of the period. The white lines of the muntins showing the divisions of the glass makes a feature of colonial work, and especially of the side and fan lights. The windows themselves were always made up of panes of glass which we call small, in comparison to the great sheets of glass possible to the modern builder. From the outside the small panes are eminently satisfactory, though modern housekeepers complain of the work entailed in the care of the smaller lights of glass, as well as the view cut off. So modern builders have compromised the aesthetic and the utilitarian by cutting the upper sash of the window into smaller lights and leaving the lower sash in a single pane of glass. In many of the old houses the hand blown glass is noticeably different from the glass we get today, and it shows in photographs by the multiplied reflections.

Salem, Massachusetts, was one of the important seaports and the trade between the Indies and the colonies was a chief source of wealth. It was also the home of Samuel McIntire, a famous colonial builder. So it is in Salem that we find some of the finest old houses of this period which were built in the north. The colonial of the South is quite different.

The Shreve houses on Chestnut Street, in Salem, are considered almost typical

of the best colonial work. There are two of these houses, built by brothers, standing side by side, and almost alike. They use the more elaborate Corinthian order for the portico, the same order at two-thirds the scale for the entrance, with the same order in a curios Palladian design in the window over the portico. Elaborate, though delicate carving is a feature of colonial work, for the capitals of the column, for the mouldings, and for much interior work.



A circular portico with the Ionic order.

A good example of the semicircular portico is also to be found on Chestnut Street, using a form of the Ionic order, which will be recognized by the capitals of the columns. To the casual observer the orders are distinguished by the capitals. The usual form of the Ionic has the face of the capital the same as these, but with the sides different. The Doric is the simplest and often the most satisfying form of the classical orders.

To those who are building homes, and who wish to follow in part at least, a type of colonial building there is this we would say: If you are building of brick, stucco, or wood, and wish beautiful bits of detail in wood, especially for the entrance and for the interior, there is perhaps nothing more satisfying than the colonial. But it should be used in the spirit of its time, and not dispossessed of much of its beauty by crowding it into unwonted positions. It should be used as an heirloom, a jewel, or an "old master," because it is more beautiful than a later time affords. Study the photographs of some of these good old houses. Do not try to copy them. They do not fit your conditions. But build in the same careful, sincere way, studying the actual things you want to accomplish, the essential needs which you must fill. In that spirit, you can use and profit by the skill of the colonial builder.

The Willow Wattle and Birdcages

W. C. Rockwood

THE quaint birdcages of old Ireland are being revived in this country. They are designed and made along the lines suggested by the cages one sees outside the cabin doorways of the Irish peasantry. The birds favored by the peasants are called the linnet, so called because it feeds on the seeds of the flax plant, and more often the native thrush of sweet voiced memory.

As far as American ideas of safe and sanitary surroundings for feathered pets will permit, the old designs and methods of the peasant willow wattler are being followed in the American manufacture. Those who know well their counties will recognize the cages of Kerry, Waterford, Galway, and Tipperary, and the models are identified by their local name.

In old Ireland the willow stick is known as the willow wattle, the process of its weaving as willow wattling. The bird cages made in New York are of genuine willow wattles, prepared by Irish peasants for the market, under the aus-



Such cages as one sees outside the cabin doorway's in Ireland.

pices of the National Home Industries Association, thus planting a home industry of the old country on a commercial basis here.

This whole process of willow manufactury in this country, especially as carried on by some of the factories employing only hand work is of particular interest with the growing popularity of willow furniture. The matter of greatest importance to the worker is the willow itself. It seems that the desired quality comes largely from France. On account of present war conditions the willow workers are testing the growths of many and various sections of the United States. For several years the government has been distributing this variety of willow to those desiring it, but it does not seem to have been taken very seriously, when not backed by the commercial demand. The report comes from certain counties in Pennsylvania where the willow sticks grown are long and straight.



In keeping with the furniture as well.

Before beginning to work with them, these sticks are placed in a tank of water, in order that they may become thoroughly pliable; then, as a sanitary measure, and to render them clean and white, the bundles while still damp are subjected to fumigation by being placed with burning sulphur in an air-tight room. The material is then ready for the workman who has a full sized pattern of the piece he is to make before him. If he is making a chair he commences by braiding together the seat over a frame of heavy wooden dowels. This completed, he puts in the upright dowels which form the legs and fills in the braided work which shows below the seat, starting by a joint with the seat and working toward the feet. The back and arm sticks are then put in, and, following his drawing, the workman fills in the indicated outlines. In this way, it is hoped to secure more of that subtle thing known as originality. How a willow stick can be twisted in almost any form is curious to see. It would appear that the willow itself is "distinctively individual." However, the wooden frames, good, straight away propositions, are handled by machinery and this branch of the service holds forth in a separate building.

Entirely simple and primitive is the method of manufacture. A particular charm about the finished product is that no two pieces are exactly alike, but show



Some of the cages are round like a ball.

by their slight variation the individual character of the material and process.

It is suggested that a woman always looks well in a wicker chair, which may be another reason for their popularity, as a clever hostess does not overlook a fact of this kind.

Wicker furniture may be given any of the soft tones necessary to fit in with a color scheme. It may be made a dull green, brown, blue, ivory or ebony. This is done by hand with a brush, and a coating of transparent shellac is added to fix the color and give smoothness. The coloring in sealing-wax red, Spanish yellow, indigo blue and emerald green is done in a bath, where the dye is soaked into the willow.

The development of home grown willows may answer the demand now put forth by the workers. In addition to this a good many of the manufacturers' designs have been distributed among the trade schools and manual training classes of the country and this may help to develop a body of willow craftsmen in this country. Thus willow furniture bids to become an "All American" product, from raw material to finished product.

NOTE.—We are indebted to the courtesy of Messrs. Joseph D. McHugh & Son for the illustrations used in the fore-going article.

Homes Recently Built

As Contributed by Keith's Readers

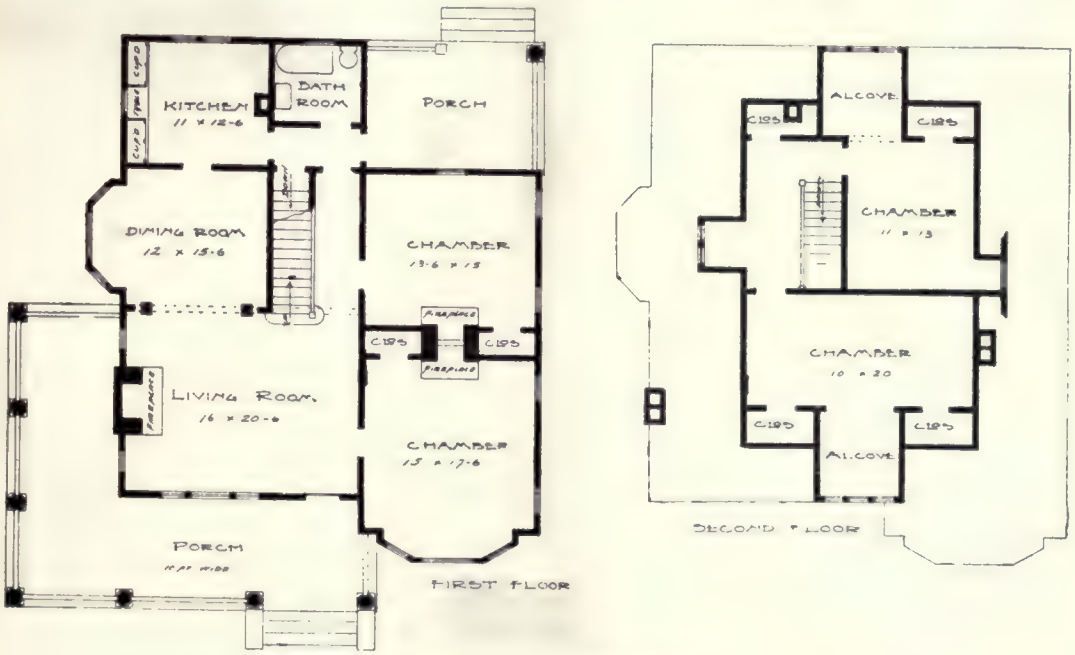
N. B. We would enjoy hearing from you with a photo of your recently built home

IN the old days "A man's house was his castle." Do we realize that now the home of the average American citizen comprises luxuries unheard of even in the great houses of the old countries until quite recently? That he has comforts which even the very wealthy could not compass, only a short time ago? Really the good time to live, as far as material comforts are concerned, is here and now.

The home is the center and heart around which the whole of life circulates. Give a man a little plot of ground and he has achieved independence. This is the heart of American institutions. That which fosters and encourages the individual home helps to build up and strengthen the nation.

The ideal of KEITH'S MAGAZINE is helpful service to the home builder. Most people build but one home. When it is completed and they have lived in it for a few months, they begin to say "If I were building again I would," and they enumerate the things which their building experience has taught them. It is always difficult to get experience at second hand; yet to a certain extent it is possible. This department offers second hand experience in building, and it is very cheap. Just compare a mistake on paper with a mistake in a completed house.

No two people will tell the same story in the same way. Neither do people build a house in the same way. As photos of homes come in to KEITH'S one is impressed with this fact; certain houses



The floor plan has been very popular.

make a wide appeal and similar plans are used in widely separated parts of the country. Keith's readers who have studied plans as they have appeared in this magazine, are probably interested in knowing "How they come out"; what kind of homes all of these people are really getting when they are finished. This month we are showing a group of homes, built from similar plans in a part of the country extending from Virginia to Arkansas, from Wisconsin to South Carolina. You will notice that they all look like *homes.* A sense of comfort per-

"I have completed this bungalow, and find it very satisfactory, having finished the living room and dining room with beam ceiling and plaster panels five feet high. The remainder of the house except bathroom is finished in pine, painted a cream color. The bathroom is tiled, and the walls as well as the woodwork are all white enamel above a wainscoting four and a half feet high which is of velvet tile. All the woodwork in the living room, dining room and hall is solid oak, and gives a very handsome effect, the floors being of polished oak, inlaid on the



As it was built in Virginia and described in the letter.

vades them, and you feel the satisfaction which the owner has taken in the building.

We shall quote some of the experiences which have come to us. What has been done may give helpful suggestions to those who are in the "stress and storm" of building, or who are planning for future work. Here follows the description of a house built in Virginia which has some unusual features, especially in the complete finish of the basement, and the care with which the details have all been carried out. The owner writes:

edge with a mahogany strip. The butler's pantry and kitchen are finished in white enamel. They are each good size, with a storeroom opening on the kitchen porch, which has been found a very convenient arrangement.

"There is a cellar 8 feet pitch under the entire house, including back porches. The walls of the cellar are all finished in white concrete paint, the floors in fawn colored concrete paint. All woodwork is painted white, which gives a very pretty effect, making the cellar almost as attractive as the second floor considering the

location of the two.

"I have hot and cold water in every room, including butler's pantry. The walls of the house are all stippled, carrying a tan color throughout the house, including the closets. The windows and doors are equipped with window strips, making them air-tight, and all of the blinds are equipped with patent fasteners operating on the inside, which does not require opening the windows. All rooms are equipped with electric buttons leading to an enunciator in the kitchen. The house is heated by a hot air plant, and there is also an open fireplace in the living room, faced with a tapestry brick. This building has cost $10,000 when complete.



As it was built in North Carolina.

"The living room has a center fixture for indirect lighting, and the direct system under the beams and over the mantelpiece. The arrangement is very good.

"The dining room has a semi-indirect lighting system. All of the fixtures were made for the building giving it a strictly bungalow effect; and the furniture, rugs, etc., were made and purchased to give the desired effect."



As it was built in Arkansas.

There is a strong touch of individuality through all of the letters received in this department which makes one rejoice in the achievement and grieve over the difficulties. That other home builders may be spared these troubles and warned of possible pitfalls is the object of this



As it was built in Wisconsin.



As it was built in South Carolina.

home-building series. What pleases one person may not please another, but that which makes trouble for one is very likely to be annoying to another.

In order to learn just what difficulties have been encountered and where the troubles lie, KEITH'S MAGAZINE has sent out a list of suggestions with which many homebuilders have been ready to co-operate.

Here is one "experience" which follows the suggested outline:

If I were building my home again—

I would leave the following features just as they are: The general plans would be the same; location of stairway, size of rooms, height, etc., are very satisfactory.

I would attend to the following things which I neglected to do: I would study wall space more carefully with reference to the furniture; the location of the lights, the doors and the way they swing. I would also plan more carefully for the bathroom to give it a proper level.

I would avoid the following mistakes: I would have the flour bins built in butler's pantry instead of in the kitchen cabinet; would also have space for piano planned between two side lights against an inside wall.

The feature I like best about my home: We have no pictures of these features, but the built-in kitchen cabinet is splendid, and we find two closets in one bedroom a thing always to be desired. The built-in buffet attracts wide attention for its beauty and capacity.

What I think about the advantage of building from good architectural plans: It cannot be estimated. When contracts are let, the owner has a means of following up the work, seeing that it fulfills specifications, and he knows it has all been figured out in the best possible way.

What I think about building by contract: It is the cheapest, if one obtains bids and then selects the best of them and can take the time to hold the contractor absolutely to the contract.

The fact that gives me the most pleasure about owning my own home: It is a pleasure to work constantly around the place, and every new addition is permanent. Just the ability to point out a well-kept, attractive place and say "my home" is, I guess, the greatest pleasure.

The Inexpensive Bungalow

IT is not uncommon for the prospective home builder to find that his taste for all that is artistic and convenient in a bungalow far exceeds the limitations of his bank account.

Originally the bungalow was a lightly constructed, inexpensive building with but few of its present-day characteristics which now comprise everything modern ingenuity can devise to make a home complete. This metamorphosis has been brought about by the great wave of popularity for the bungalow which has swept over Southern California and other parts of the Pacific Coast and is now spreading over not only all of our own country, but foreign countries as well. As this popularity is no respecter of persons, it has captured the rich man as well as the poor, and the best of architects and designers have turned their attention to bungalows, and naturally more attention has been given to the expensive than the inexpensive.

So, as the man of moderate means begins to look around for ideas to incorporate in his new home, he is often attracted by that which is too expensive for him. This is not because it is impossible to obtain artistic effects in the inexpensive bungalow, but because it requires as much artistic skill and vastly more labor to adjust all the real requirements to the price of the inexpensive house. This skill is one of the costly elements.

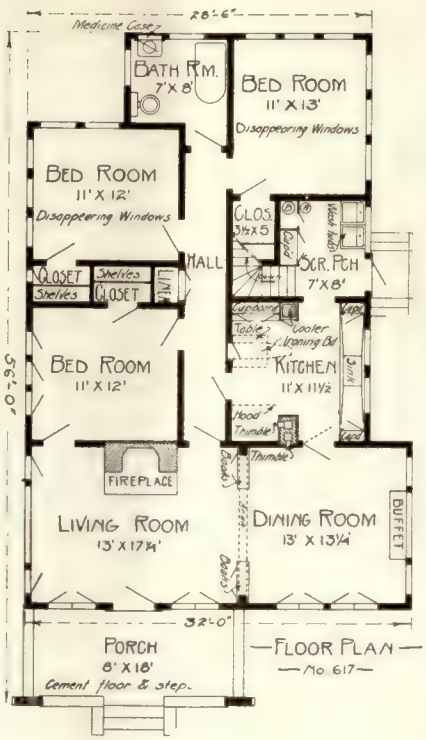
On the floor plans of "Woodland Home" are shown bedrooms with disappearing windows. These windows supply the want of those who desire a great amount of fresh air in their sleeping rooms. They take up practically all of the outside wall space, and as they are



"Woodland Home." —*George Palmer Telling, Architect.*

only three feet in length the ordinary bed may be placed under them at any point desired.

These windows open by simply sliding down into the pockets in the wall below. When open they are out-of-sight, as the opening is covered by the stool which is hinged underneath, allowing it to swing up for the passage of the sash. When closed this stool automatically locks the sash in place. As these sash are balanced with window weights, the same as a double-hung window, they are easy to operate.



With these windows in a bedroom it can be almost instantly changed into a sleeping porch. And there are these advantages over a screened sleeping porch that a portion of the windows may be closed, thus regulating the draughts, or all may be closed in cold and stormy weather, or when the house is vacant, keeping out dust and dirt and protecting the interior from the weather.

The "cooler," which will be noticed in the kitchen of this floor plan, is such a common characteristic of the California bungalow that it is to be found in almost all of them. It is simply a cupboard for food, and having shelves ventilated by screen or made of strips of wood and open at the top and bottom, allowing the passage of a current of air caused by the difference in atmospheric pressure, and by the winds outside of the house. Food placed in the "cooler" is kept cool by this current of air, many times obviating the necessity for ice and refrigerator.

"Woodland Home" is a very attractive bungalow of the "hip-roof" type. While the setting makes considerable difference to the appearance of a house, this bungalow would make an excellent showing with almost any surroundings. The low pitch and the wide over-hang of the roof goes far to produce its home-like appearance.

The front porch has a cement floor and cement steps. A careful study of the floor plan will disclose its many convenient and attractive features. A cement cellar is reached by stairs from the screen porch and, while no furnace is provided for, there is plenty of room for one.

A Shingle Cottage

THE essential cost in the building of a house is for foundations, walls and roof. If the space that is necessary under the roof can be utilized for the second story and still have good ventilation over, yet without cutting the ceilings of the room, the space enclosed has been used with the greatest economy.

The cottage shown in this illustration is 25 feet in width by 44 feet in depth,

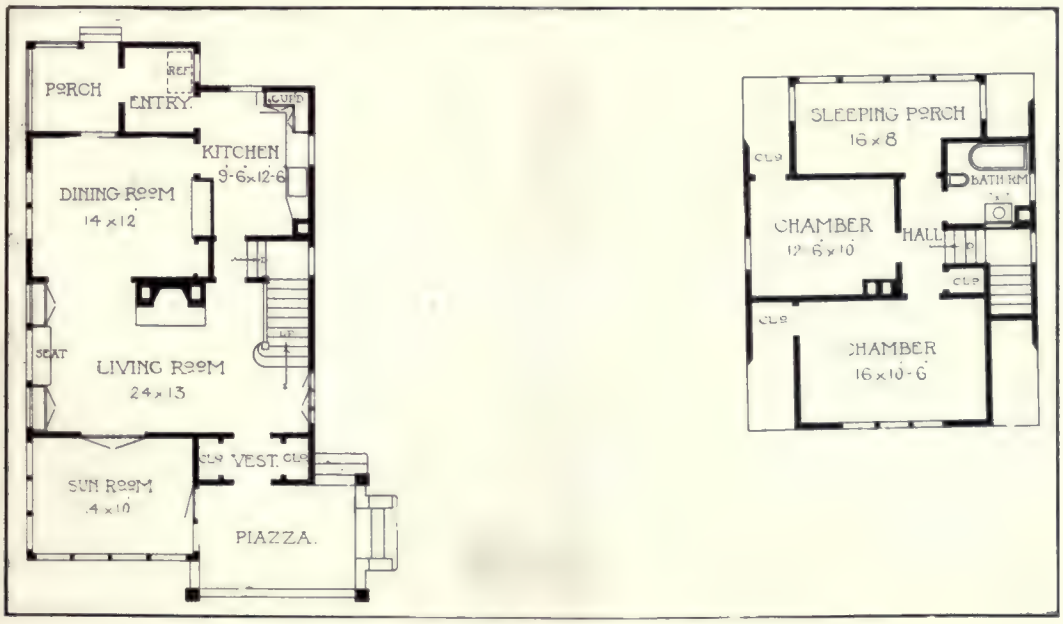


—Chas. S. Sedgwick, Architect.

The entrance at the side of the porch leaves an unbroken lawn.

including the sun room in front and the rear porch. It is designed to have a full basement with concrete foundation, and to be built with frame construction, cemented on the outside up to the first story window sills. Above this point the exterior is shingled with alternating wide and narrow courses and the roof is shingled. A suggestion for exterior treatment is to stain all of the shingles green, using a dark shade of green on the wall shingles, and a lighter shade of green on all roof shingles. The outside trimmings, cornices, casings, etc., and also the window sash, may be painted white.

The interior is finished with oak floors



for the first story and birch floors for the second story, natural birch casings, doors, etc., throughout the first story and white enamel finish for the second story. The arrangement of the plan is very convenient and has many pleasing features. It is well suited to the ordinary city lot with either south or east frontage.

The porch entrance is from the side, leaving an unbroken front lawn. The vestibule has a closet on either side of the door, and opens into the main living room, which is 24 feet by 13 feet. The end of the living room is filled by a seat and bookcases with windows over and connects by French glazed doors with the sunroom, which is 14 feet by 10 feet. The sunroom is enclosed with windows and has the same finish as the main living room. There is one central chimney with a wide fireplace in the living room, which provides a flue for the heating apparatus in the basement. The kitchen has a separate chimney.

The architects' estimate for building this cottage exclusive of heating and plumbing, is from $3,000 to $3,400. The dining room has a recessed sideboard and china closet, and connects with the living room by wide cased opening, and connects conveniently with the kitchen in the rear. The kitchen is well provided with wall cupboards, sink, etc., and opens out into a rear entry with space for refrigerator and thence onto the rear porch. The second story has two good chambers with large-sized closets, a good bathroom and a fine sleeping porch in the rear. The shape of the roof admits of these rooms being full height.

Clinker Brick and Cobblestone

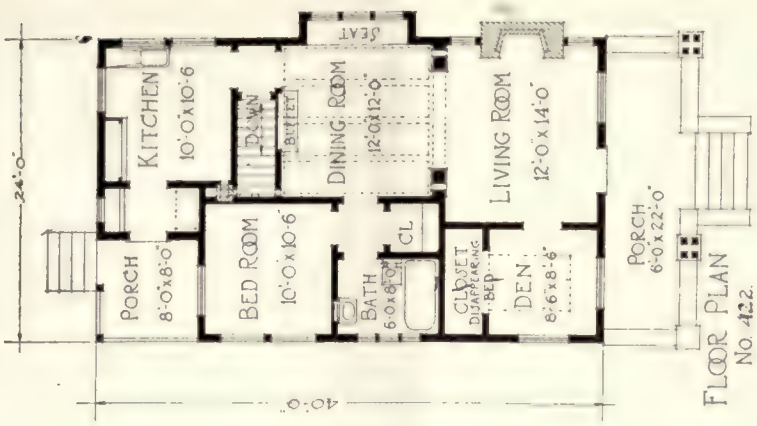
HERE is a shingle bungalow in which the use of rough clinker brick and cobblestone adds a pleasing touch to the otherwise plain surface of the exterior. Clinker brick were first produced accidently by the super heating of the inside of the kiln. The brick subjected to the greatest heat tend to liquify and adjacent bricks weld together. In extreme cases they form fantastic shapes. In any case the surface is vitrified with a rough surface. This brick is used to quite a large extent in the construction of bungalows and very pleasing results have been secured.



An artistic bungalow. *—Jud Yoho, Architect.*

The specifications for this attractive bungalow call for rough cedar siding as high as the water table with shingles above for the exterior walls.

The living room and den are at the



front of the house. A closet for a disappearing bed is built into one end of the den, making it possible to convert this room temporarily into a sleeping room if the unexpected guest should make it necessary.

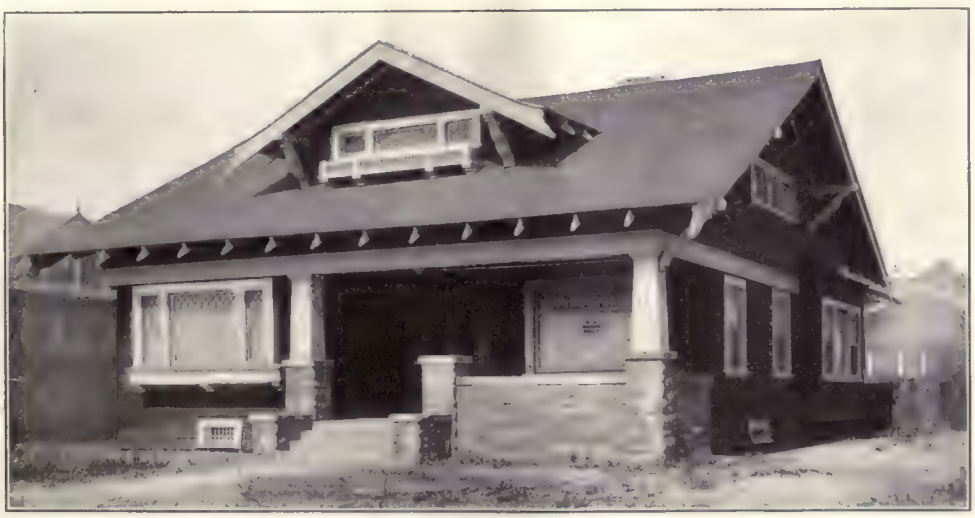
The dining room has a large window seat with a locker underneath and a built-in buffet of extraordinary design. Between the rear porch and kitchen is a vestibule just large enough for a refrigerator.

The cost, says the architect, is $1,500.00.

A Canadian Bungalow

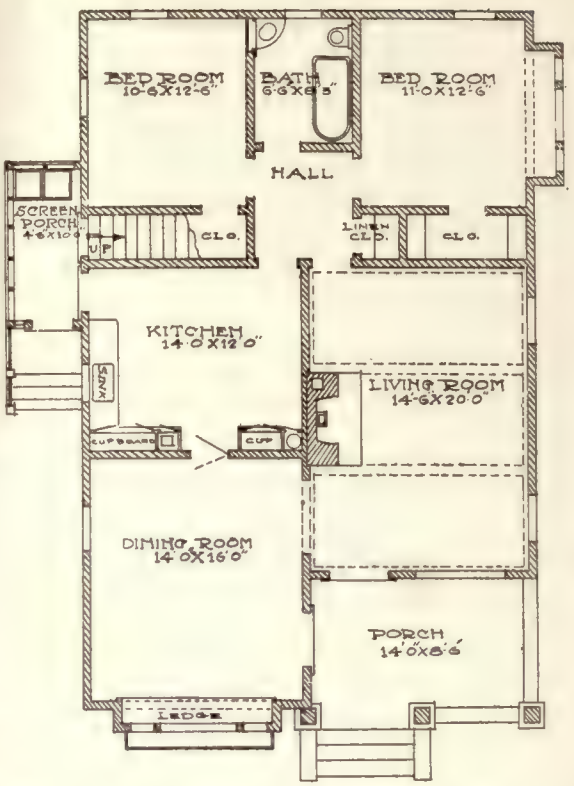
THIS compact little home was originally designed for a location in Canada which was frequently visited by high winds, snow, rain and extremely cold weather. Every endeavor was bent to secure the true bungalow effect and yet to make the house in shape and construction "as solid as Gibraltar," and yet it is well adapted to any section of the United States.

The exterior is almost severely plain; its



Built to withstand wind, snow and rain. —*Bungalowcraft Co., Architect.*

attractiveness, which is always admitted, being due to the fact that every line, angle, and measurement is artistically right. The exterior needs little description: The shingle roof, porch work and exposed faces of chimneys of artificial stone as shown, or of brick if preferred; side walls shingled up to the water-table and then weatherboarded to roof. As here shown the attic is to be used for storage, hence the outside stairway, but two good bedrooms with closets may be built on second floor with a different arrangement providing inside stairs to both cellar and second floor.

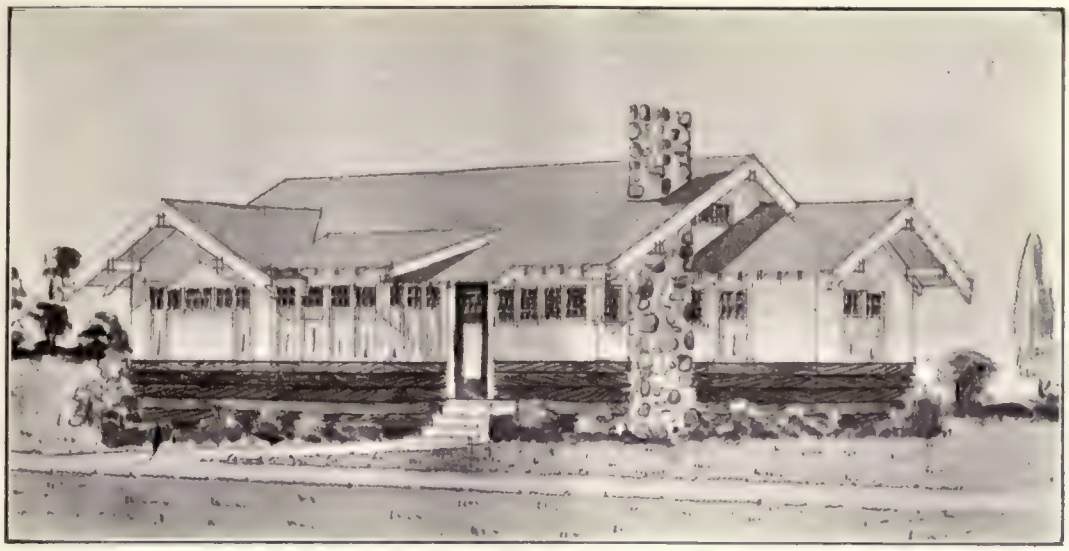


The building is about 30 ft. by 46 ft. over all and it has been completed in California with the usual light construction, the architect tells us, for $1,600.00. In Canada, built to withstand the coldest weather and with full basement and furnace, he estimates it would cost $2,550.00 ready to move into. The rooms are of good size, with closets and linen closet; the cabinet kitchen has every convenience built-in. There is also a well fitted bathroom. The living room has beamed ceiling, mantel and a broad fireplace, the chimney having three flues, one for furnace, one for kitchen and one for fireplace. The dining room is of good size with a wainscoting and plate rail and a pretty window ledge and flower box. The house is light, with a good circulation of air from all directions. Plenty of windows insure this.

Rough Siding and Cobblestones

IN this design considerable study has been put upon the arrangement of the floor plan in order to make it not only practicable and convenient, but to create an attractive exterior as well. In doing this the exterior materials have been given especial consideration. The designer has here used a combination of rough-sawed siding with white cement plaster above, and a shingle roof stained a maroon color. The cobblestone chimney plays an important part in producing the desired results.

The entrance has been placed at the right of the sun porch, sheltered by the wide projection of the main cornice. It opens directly into the large living room. Note the location of the doors and windows in this room. With the fireplace in the end it leaves plenty of wall space for a piano or a large davenport. The hall adjoining gives privacy to the chambers

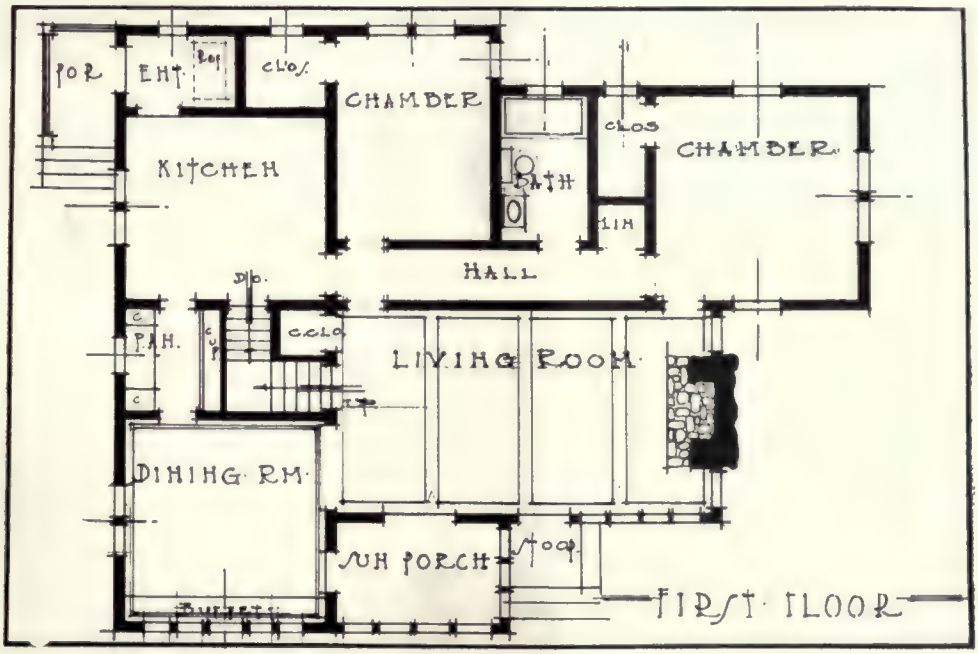


Light and air is abundant. —W. W. Purdy, Architect.

while having access to the living room and kitchen. French doors from the living room open onto the sun porch, while a cased opening separates the living and dining room.

The dining room is large enough to accommodate a family of six. The massive mission buffet extends across the entire end of the room, and is unusually attractive. A good-sized pantry is provided between the dining room and kitchen. The refrigerator is placed in the rear entry, off which is a small porch.

Two chambers, bath and linen closet, open off the center hall, without an inch of waste room. Large closets open off



the chambers, each having an outside window, affording good light and ventilation.

A stairway leads from the living room to a well ventilated attic, where an additional room could be finished off if desired. Under these are the stairs to the basement, where, in addition to the furnace room, laundry, fruit and vegetable room, is a drying room. In the basement is also a large amusement room.

The floors and finish of the living, dining room and sun porch are all in oak. The rest of the floors are of maple, with white enameled woodwork. The bathroom has floor and wainscot of tile.

Homes of Individuality

Selected by W. J. Keith, Architect



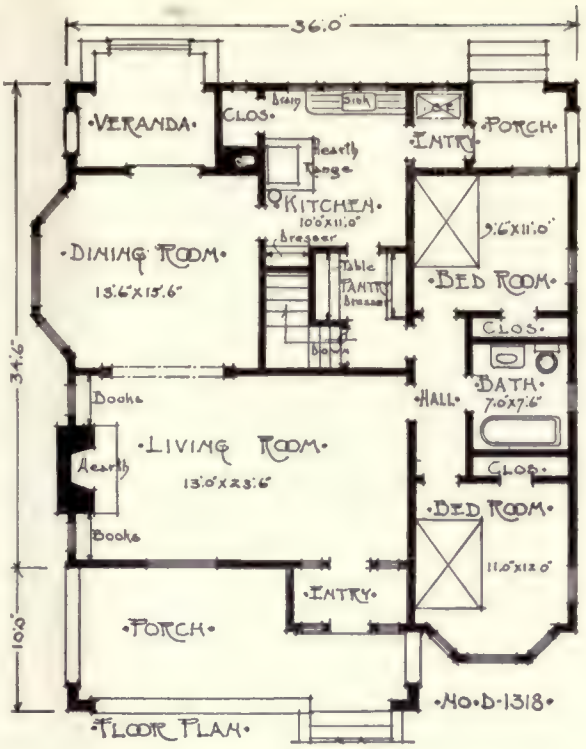
A charming home.

A Carefully Detailed Bungalow.

TIMBER work, with virge boards and brackets in the gables lends itself particularly well to stucco treatment. An exceedingly fine example of a bungalow is shown in this photograph. The side walls are plastered with cement mortar. The head casings and sills of the windows are continuous around the house and these, with the corner boards, form various sized panels in the stucco. Much charm is due to the entrance with its substantial columns, and the well detailed gable treatment.

The floor plan is well arranged. The living room is entered through a vestibule from the front porch. An artistic fireplace with bookcases built-in on either side below casement windows completely furnishes one end of the room. A wide window gives a panoramic view of the front garden and approach. Beyond is the dining room with

a wide bay affording views to both front and rear. The center window of the bay is raised to accommodate a china or glass closet below. A veranda with extended balcony overlooks the garden and connects with the dining room through a pair of glass doors. This will make a charming little corner and with an awning shading the balcony form a spot for outdoor dining. Service can be had from the kitchen through the dining room. The kitchen is well arranged with a dresser and good sized pantry. Alongside the range is a large ventilated store closet and opposite an entry, with provision made for a refrigerator, leading to a service porch. The kitchen connects with the bedroom hall and basement through the pantry. Two bedrooms and bath are provided. The front bedroom is unusually desirable, having a bay window exposure to the front. Both bedrooms have windows on two sides and are thus assured an abundance of fresh air and sunlight. The bedroom closets are ventilated to the attic through registers in the ceilings. The attic is provided with ventilating louvres in the front gable. A full basement extends under the kitchen, dining room and pantry. The laundry is located under the kitchen and a cold storage closet under the pantry. The rest of the basement provides ample room for heating apparatus and fuel rooms.



An American Chalet.

The broad sweep of the roof always gives interest to a house. Even though the walls are more or less broken in outline, the house preserves a pleasing simplicity. The lines of the porch are well arranged. The white of the porch posts, cornice and outside finish gives a good accent. Notice that the water table is placed just below the basement window sills, and that the wall is shingled from there to the peak of the gable, eliminating the line so often seen at the head of the basement windows. This adds to the seeming heighth of the building and makes a good looking wall surface.

Both porch and living room extends the full width of the house, with a central door. The fireplace is the especial feature of the room, with the bookcases and high windows on either side, filling one end of the room.

A wide opening connects the dining room with the living room, one end of which is filled with windows. The dining room is a good-sized room, 15 feet by 13 feet, though it is dwarfed by the huge living room. A short hall connects the three bedrooms and the bath, while separating them from the rest of the house.

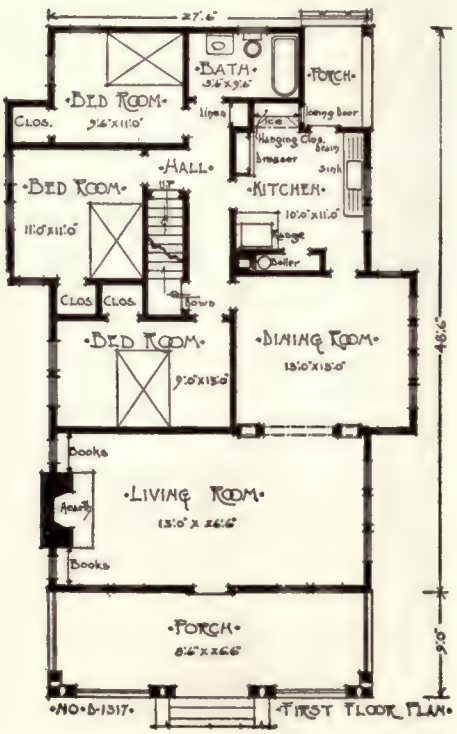
The range boiler is usually one of the unsightly things in a kitchen. You will notice that it is placed in a closet back of the range. Such a shallow closet is ex-

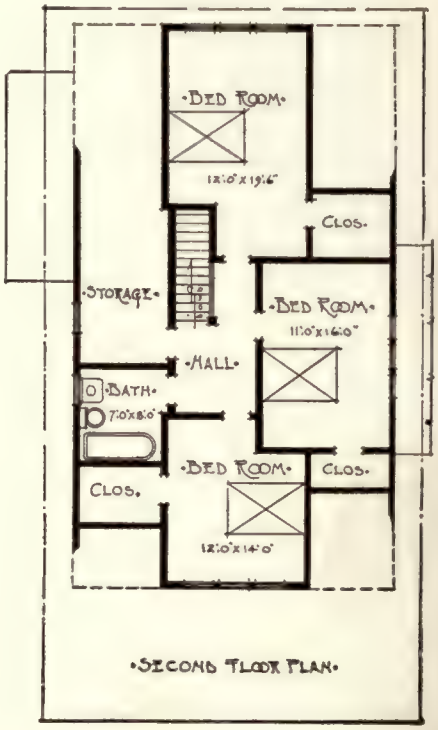


The house has a surprising amount of room.

tremely useful beside the range. The sink has good tables and is not far from the cupboard. The refrigerator may be iced from the rear porch. Over it is a high cupboard. The linen closet is convenient beside the bathroom.

Three additional bedrooms and bath are finished on the second floor, one in each of the dormers, front and rear, and one in the gable. The house does not look large, but it has a surprising amount of room.







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Making the Most of the Bay Window.

ABSTRACTLY considered the bay window is a charming feature, but practically it is apt to leave something to be desired. It is often difficult to curtain and it looks rather unfinished without cushioned seats, yet these are not always practical. A very large bay, say eight feet across, gains by being separated from the room behind it by long curtains hanging straight and well pushed back, curtaining the separate windows with the thinnest of net.

In a living room there are two particularly good things to do with the bay window. One is to fill it with a plant table, one of the substantial sort with a sunken top, zinc lined, into which the pots are set, the other to use its central space for a small desk or writing table, with a chair to match it. This latter use is specially good for the bays so common twenty or thirty years ago which had two long windows and a central one high up in the wall and often of stained glass.

In utilizing the bay window in a bedroom, we cannot do better than to set a dressing table in it. This is an English fashion which has much to recommend it, as the light falling from both sides and from above on the sitter before the mirror gives an absolutely truthful impression, even if it is unflattering. Moreover the thin curtains at the windows of the bay are a capital background for a dressing table draped with chintz or cretonne.

Interesting Pieces of Furniture.

New pieces of furniture are constantly being devised, some of them very desirable. One of them, in mahogany, for the dining-room is called the cache silver table. Its top lifts and gives access to two trays, one above the other, in which can be kept the entire supply of small silver, while nothing in its exterior would indicate that it was anything but an ordinary table.

Another table is among the cretonne covered novelties and this, too, has a lifting top which is hinged and turns back to give access to a tray fitted with all the necessities for sewing and deep enough to hold any quantity of work, which is entirely concealed when the cover is dropped.

The small sized gate-legged tables are not exactly new, in fact are copied from old models, but are as interesting in their way as the large ones and more generally useful. They come in either oak or mahogany and have drop leaves with an extended diameter of about three feet. They cost twelve dollars.

A Novelty in Window Shades.

A recent window treatment is the use of glazed flowered chintz for window shades. They are made exactly like those of Holland or painted muslin and are used in rooms with chintz furnishings to match. A thin net curtain may hang next the pane. These shades exclude less light than ordinary curtains and can be run to the top of the window in gray weather and be quite out of the way. They are extremely pretty for a nursery or for a sun parlor or inclosed porch.

Giving the China a Background.

The china closets you buy are backed either with polished wood or with mirrors, and neither are good backgrounds. The mirrors are worse because they give a confused reflection of little bits of the room which is no background at all, and the result is a jumble. But give your cupboard a backing of definite color and your wares take on new beauty. Either old gold or



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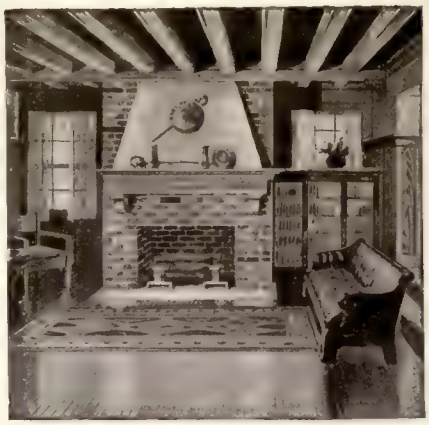
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Interiors Beautiful

200 VIEWS



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silver is a good choice for this purpose. One of the rooms of Oriental porcelain in the Metropolitan Museum is lined with old gold raw silk, but perhaps olive is of more general adaptation, and a good material to use is a light quality of velveteen. The shelves as well as the walls of the closet should be covered and the edges finished with a gimp matching exactly. Old blue is a good background for silver, peuter and crystal, while silver alone looks well against crimson.

This same cheap velveteen is useful for table covers to conceal marble tops. The cover should follow all the outlines of the table top accurately and be edged with a fringed gimp.

Tapestry Papers.

For rooms whose size is large enough to admit of a patterned wall, some of the new designs in tapestry papers are charming. There is one in tones of blue grays and gray blues, with masses of foliage and an occasional suggestion of tree trunks that would be beautiful for a hall or for a large bedroom with mahogany furniture. Pictures are out of the question with such a wall.

Other tapestry papers are in pale shades of green, and are adapted to use with white or light colored bedroom furniture. The gray foliage papers are always pleasing, and some new designs show a graceful arrangement of delicate foliage with a bird here and there, all in gray tones, the background being formed by fine lines. Now and then one sees a foliage paper in brown tones, but that color does not seem to be as successful for this class of paper as the greens or grays.

Scarlet and Orange Glass.

Glass in vivid tones of scarlet and orange was mentioned recently. It can be had in quite a variety of different pieces, boxes and bottles for the dressing table and ornaments of various sorts. It is used effectively to light up a subdued color scheme. The orange is effective with a combination of blue and white and gray walls, the scarlet with blue gray tones. Now is the time with all this fondness for brilliant color to bring out the boxes and trays of scarlet lacquer which some of us must have put away.

The little Japanese cabinets that used to be so popular are very convenient to stand upon a dressing table to hold the odds and ends, which accumulate so rapidly.



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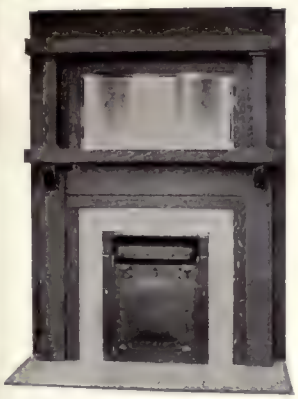
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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

In Mulberry and Gray.

F. H. M.—"Inclosed find plans for Dutch Colonial house we have well under way. May I avail myself of the opportunity of your help in arranging the interior decorations?

"Kindly suggest color scheme for living room, study and dining room. The stairway has rail and treads stained mahogany, fireplace is tapestry brick of medium dark shade.

"I have three colonial mahogany chairs, old fashioned sofa with a high back, two small chairs that go with sofa. I wish all to be covered with tapestry that shall harmonize with room and furnishings. I have also an old fashioned rocker now covered in velour and large rattan chair. I am partial to old rose and mulberry shades. I am handicapped, for in my town the stores carry but little in materials suitable for interior decoration, so I depend on your magazine and send for samples."

Ans.—Your sketches show a very pretty home with well arranged floor space. As living room and hall will be practically one room, the wall tint in both should be the same. A soft warm grey, such as a putty grey, will be the best choice, and then use old rose or mulberry tones for rug and furnishings. We would have a plain rug with medium mulberry center and two tones in border, one darker, one lighter than center. Then in hall, use an oriental or an oriental design, in mixed colors, old rose predominating. Personally, we should want a runner on the stair. The old fashioned mahogany should be covered in a small figured colonial tapestry. There are excellent materials of this kind in elephant greys and mulberry coloring.

We should like to see the rocker and the rattan chairs in plain mulberry velvet. These greys and mulberry tones will be lovely with ivory woodwork. We would use an old gold color scheme in study, with rug in browns and creams, possibly some dull red or rose. Old gold sunfast for curtains.

Make the dining room wall a soft ecru, with cream ceiling, rug in old blues, old blue sunfast for valance and side draperies in west bay. We do not like the cupboard projecting into this bay. It should have been placed in the angle on opposite wall.

Colonial Treatment.

F. J.—In building a house southern colonial style would it be good style to use the large fluted columns with small plain ones for side veranda? What style windows with colonial front? What style door, use bell or knocker? We want an attractive fireplace with bookcase built in the wall—what color brick should be used with fumed oak woodwork and furniture?

Ans.—Since you are planning to build a house in the southern colonial style we recommend that you get photographs or cuts of some of the good old colonial houses which you admire and which fit some of your conditions, and adapt them as far as practicable in designing your house. Some good colonial entrances are shown in this number of KEITH'S Magazine.

You must remember that in planning a colonial house, as in following any "style" you are following a mode whose time is long past, and that probably only a few of your conditions can be similar to those of the earlier time. Colonial windows had, of necessity, small panes which are more interesting than our larger sheets of glass. Colonial houses are famous for their beautiful entrances. Most colonial work was designed to be



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painted white, or for mahogany, and in either case the mouldings were delicate, yet sturdy, not so heavy as would be used for oak. In using fumed oak for your living room woodwork, you are showing your independence of the old colonial period.

To select brick to be used with fumed oak for your living room, see if your dealer can not show you brickwork with fumed oak beside it. Red is always good, or you may like a chocolate color with the oak.

The Finish of Doors.

W. J. F.—I am a subscriber to your magazine and should like very much to have your suggestions concerning our new home.

It is to be of the bungalow type. The woodwork and floors are to be white oak with the exception of the bath and bedrooms which are to be in white pine, enameled white with closet doors to match furniture, early English in one room, polished Circassian walnut in the other bedroom. Should the inside of the doors into the bedrooms be made to match the closet doors? Should mirror be put on inside or outside of closet door?

What about shades for casement windows that swing in?

Ans.—We are pleased to reply to your inquiries. The bedroom doors should all be finished the same on the side facing into the bedroom.

It is a matter of convenience, or preference, whether the mirror shall be on the inside or outside of the closet door—either is proper. It will be quite correct to use a fumed oak stain on the woodwork of the living rooms, in fact much the best thing to do. As to the floors, our personal preference is for a slight stain; but the majority of people leave them natural. They are supposed to show dust less. Your brown fireplace brick are all right, if set in white or cream mortar.

Ordinary shades are used on casement windows, the only difference being in the fixture, which is a bracket projecting out about three inches, with a socket on outer end to receive a second rod for the sash curtains. Both shade and curtains are set on the sash of the in-swinging casement.

Kitchen Finish.

F. M. P.—Will you help me to plan the kitchen in my new home? The room is fairly large, sunny, and finished in pine, with much cabinet work—cupboards, breakfast nook with settles, etc.

My first thought was blue and white with woodwork all in white and panels lined in black or dark blue. Now I have come to fear all this white will require endless care. Could I use gray instead and still retain a charming equipment in blue and white china, crockery, etc., all purchased with the blue and white in mind? And could I still have an exposed red brick chimney with geraniums in the breakfast nook window? What wall color?

I can imagine a charming kitchen in blue and white, or in gray, red, and black, but I don't seem able to reconcile all the colors. I prefer gray rather than brown stain, since I am using gray throughout the house in combination with white trim and mahogany furniture. Would yellow, gray and blue harmonize in kitchen, which is also a sort of living room? Would you recommend cement or tile brick floor with wool rugs?

Ans.—Nothing will be *so good* for your kitchen as white woodwork, and if you have a good *varnish* finish, it is just as easy to take care of as the gray. The trouble is that with your built-in cupboards, settle, etc., there is so *much* of it. Now you can help this out by having white doors to your cupboards, white window sash and casings and white baseboard with cap molding of baseboard stained either green or mahogany, also the body part of cupboards like a frame.

The stained parts must be varnished, so as to wipe off easily. Then paint the wall straw color or light buff. Your blue china will look lovely in this setting and the red brick chimney and red geraniums all right—a pretty touch.

If by cement floor you mean a composition floor—that is all right—make it a dark buff—gray would not be pretty at all. We should omit the lines of black paneling in any case—ceiling should be white.

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The Servidor

Warren B. Bullock



The outside of the Servidor.

A KITCHEN door which serves as a mechanical maid, which does away with the intrusion into the home of delivery men and boys, which makes possible the reception of parcels while the housewife is away from home and which locks the goods in after they have been delivered, is a new invention which has originated in Milwaukee and which is being installed in many apartments and private residences that are being erected this year. Architects to whom the new idea has been submitted have hailed it as meeting a long felt want and have welcomed it with enthusiasm, prophesying that within a few years all specifications for apartments, buildings and a large number of private residences will include the Servidor as a matter of course.

The Servidor and its ingenious interlocking device upon which the success of the door depends are the invention of Frank J. Matchette, a wealthy Milwaukeean of an inventive turn of mind, who was the first man to install the stationary vacuum cleaning plant as part of the equipment of public and private buildings. His latest invention is described as a door that is always open and always closed, always locked and always unlocked. The seeming paradox is

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render the motor operation entirely automatic—no winding or attention of any kind during the entire heating season. In homes not having electric current our direct current motor is used, the power being supplied by four dry cells. With our alternating current motor the power is secured direct from the lighting current.

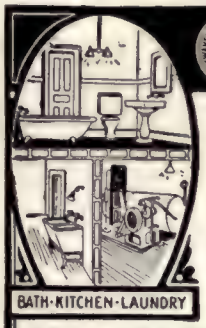
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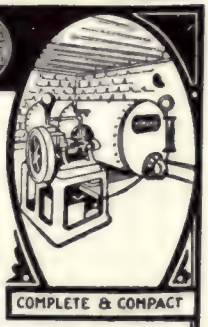
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easily explained.

The Servidor is a new and ingenious keyless four compartment door through which parcels from the tradesman to the home or from the home to the tradesman can be safely and automatically delivered, day or night, without the personal attention of housewife or maid. The tradesman who comes to deliver goods merely opens the outer door of any one of the compartments which is marked "Vacant" puts the goods in, shuts the door and turns the thumb - bolt. When this is done the outer door automatically locks itself against the tradesman as well as against any later comer, changes the small indicator card to "taken," and releases the inner door of the compartment so that the goods can be removed from the compartment by anyone in the kitchen. As soon as the goods have been removed and the inner door to the compartment has been closed and the thumb bolt turned, the automatic lock again performs its service, the indicator again reads "Vacant," the inner door is locked and the outer door is released. Thus the door is made absolutely burglar proof as only one door to the compartment can be opened at a time. When the compartment is empty it can only be reached from the outer side of the door. When it is occupied, the only access to it is from the kitchen side of the door and neither delivery man nor housewife is ever bothered with a key.



The inside of the servidor.

The Servidor is an outside door of regulation size. It is hinged and locked and it opens and shuts like any ordinary door. In addition, however, it has four compartments which take up the space usually given to panels and glass. These compartments are set in the frame of the door, one above the other, making this part of the door a few inches thicker than the frame of the door. The compartments are 6 in. through.

When the delivery man comes to the outer door, he does not ring nor is he compelled to wait for someone to come to the door. He merely opens a compartment marked "Vacant," puts his goods in and goes away, a great saving in time and efficiency both for the dealer and for the housewife who is not called to the door each time a delivery man appears but who, if she wishes, can wait until all the compartments are filled before she takes care of the goods.

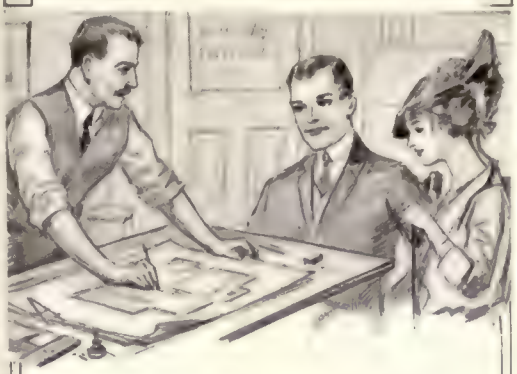
The danger of theft, which is one of the problems of apartment building life, is thus obviated. The only compartment which can be opened from the outside while it is occupied is the upper compartment, reserved for outgoing parcels.

In it the housewife can put her milk bottles or soiled laundry for the tradesmen to gather up but this compartment, like the rest, is so interlocked that the outer and inner doors cannot be opened at the same time.

A little steel rod and a latch with a hole in it solves the problem. As the compartment door shuts and the catch moves into place, it springs a bit of mechanism which throws the rod forward just in time to pass through the hole in the catch, thus effectually locking the door. This rod operates in a metal box which extends the width of the compartment connecting the inner and outer doors. The rod is just long enough so that when one end of it extends through the catch of the inner door it cannot possibly reach the catch on the opposite door. It can only be released by opening the opposite door and shutting it, thus throwing the bolt back and locking the door that has just been operated while the other one is released. At the same time, the mechanism also changes the word on the indicator. A metal plate slides up and down past each indicator glass, these plates being connected by a rod which operates like a seesaw. When the upper part of one face, on which the words "Vacant" and "Taken" are printed; one below the other, shows in the outer indicator, the lower part of the opposite face shows in the inner indicator, the seesaw being operated by the same mechanism which throws the bolt.

Managers of apartment houses are especially enthusiastic over the new invention, declaring that it means the elimination of the parcel room and of many complaints about undelivered and gone-astray packages. Merchants declare that its ever-ready "Give and take" service will greatly simplify the house delivery problem and that the saving of time now consumed by waiting for bells to be answered and by second deliveries will cut down the expense of the delivery service at least one-half, making it possible for one delivery truck to do the work now done by two.

To the housewife who has learned the value and the convenience of the milk box, the extension of a similar service to cover delivery of dry goods, groceries, meat and laundry is expected to make forceful appeal.



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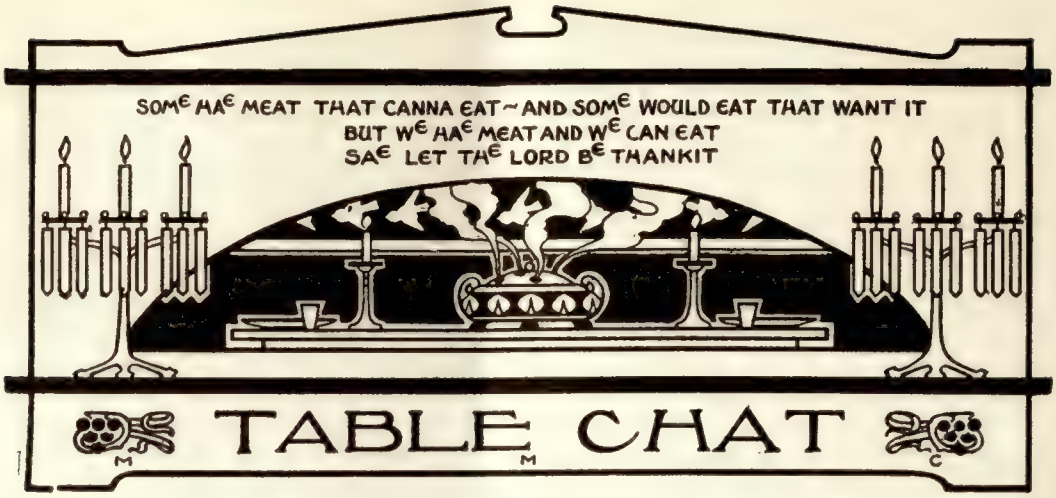


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Meals Without Meat

THERE is almost always a hot wave in the early part of September, more trying than the heat of June or July, when life is a burden and the thought of heavy food nauseates. Then is the time to cut meat out of the daily menu and to find some acceptable substitute for it.

The principal substitutes for meat, containing the same amount of the needed protein, are beans, nuts, cheese, some sorts of fish. Dr. Wiley has recently stated that what is known as pink Alaska salmon, the cheapest grade of canned salmon, is the most economical form of animal protein. Properly prepared it is very palatable and can be used in a variety of dishes. But we will rule it and other forms of fish out and consider the assembling of the elements of an acceptable vegetarian dinner from soup to dessert.

Menu

Tomato Puree, with Cheese
Creamed Eggs
Stuffed Egg Plant
Cauliflower Salad
Chestnut Pudding
Coffee



An egg plant salad.

For the soup use two cans of tomato pulp which are sold for about four cents each. Thin it with rather more than its bulk of hot water, season it with pepper and salt and add a good lump of butter. For many people it will be improved by the addition of a little sugar. Grate a quarter of a pound of sharp American cheese and beat into it two eggs, and very gradually add a cupful of the hot soup. When it is quite smooth pour the mixture into the soup and let it

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"Gentlemen:
I have used the Williamson UNDERFEED furnace for a year with full satisfaction. It has, ordinarily, cost me from $60.00 to $80.00 to run the furnace to heat my house. With the UNDERFEED I expended less than $25.00 from November 1st, using Buckwheat hard coal.
Respectfully yours,
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In the New-Feed UNDERFEED, coal is fed from below. Fire is always on top—never smothered. Thus every bit of heat is utilized. In addition, all smoke, gas and soot—heat elements—are consumed since they must pass up through the fire. Therefore clean and healthful as well as economical.

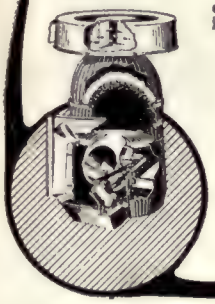
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Protect your family's health and keep your house and grounds clean and sanitary with a **Majestic Garbage Receiver** and a **Majestic Coal Chute.**

Bury the Garbage Receiver in your back yard close to the kitchen. It is handy, but never unsightly. It is sanitary, emits no odors and keeps contents safe from dogs, flies, insects and vermin.

The Coal Chute can be placed in the cellar window space. It protects the house from mars, saves the lawn from coal dust and prevents a waste of coal.

MAJESTIC

Garbage Receiver
The only part exposed is the top and door. This opens and shuts with the foot to empty garbage.
To empty contents simply take off the iron top and lift out the can.

Coal Chute Hopper comes out and catches all the coal. None is scattered over the lawn or sill. When closed sets flush with the foundation. Has a glass door giving good light to the basements. It locks from the inside and is absolutely burglar proof.



Write for Catalog

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New York City, 50 Beekman St,
The Galt Stove & Furnace Co., Galt, Ontario, Can.
Kansas City, 5212 Saida Ave.

boil up. Serve with croutons. This soup is very substantial and is good for the main dish at luncheon.

For the creamed eggs allow three for two people. Boil them twenty minutes and when they are cold cut them lengthwise and slantingly in rather thick slices. Make half a pint of cream sauce and heat the eggs in it. Have a sufficient number of slices of thick, crustless toast well buttered and lay them in the bottom of a casserole. Pour a very little hot water in it is tender, but not overdone. When cold arrange the flowerets on a bed of lettuce leaves and cover with a sour cream salad dressing.

The chestnut pudding is made from the large French chestnuts. Boil them for ten minutes, take off the outer shells and pour boiling water over them to remove the inner brown skin, then simmer them slowly in salted water until they are tender enough to mash. To a cup of chestnuts add two eggs, a pint of milk,



Asparagus and eggs.

so that the toast may absorb it and then add the egs. Brown bread may be used for the toast.

Choose a large egg plant and cut off the top. Scoop out the inside and chop it finely. Add to it a small cupful of bread crumbs moistened with milk, a cupful of nut meats, a small onion minced and browned in butter, salt, pepper and a tablespoonful of butter. Fill the shell with the mixture, set it in a dish with a little hot water and bake about half an hour. Serve on a bed of celery leaves and pass brown bread and butter with it.

For the salad pick a cauliflower into flowerets and cook it in salted water till sugar to taste and a flavoring of vanilla. Pour the mixture into buttered cups, steam and when cold turn out and surround with whipped cream.

In some parts of the country egg plant is not attainable and a good substitute is made by scrambling eggs, two to each person, and arranging them in a circle around a chop dish, filling in the center with the contents of a can of asparagus tips heated, passing Hollandaise sauce with it. Substitute an onion soup for the tomato puree and use fried tomatoes for the entree instead of the creamed eggs.

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FIREPLACE EXPERT

Building Material

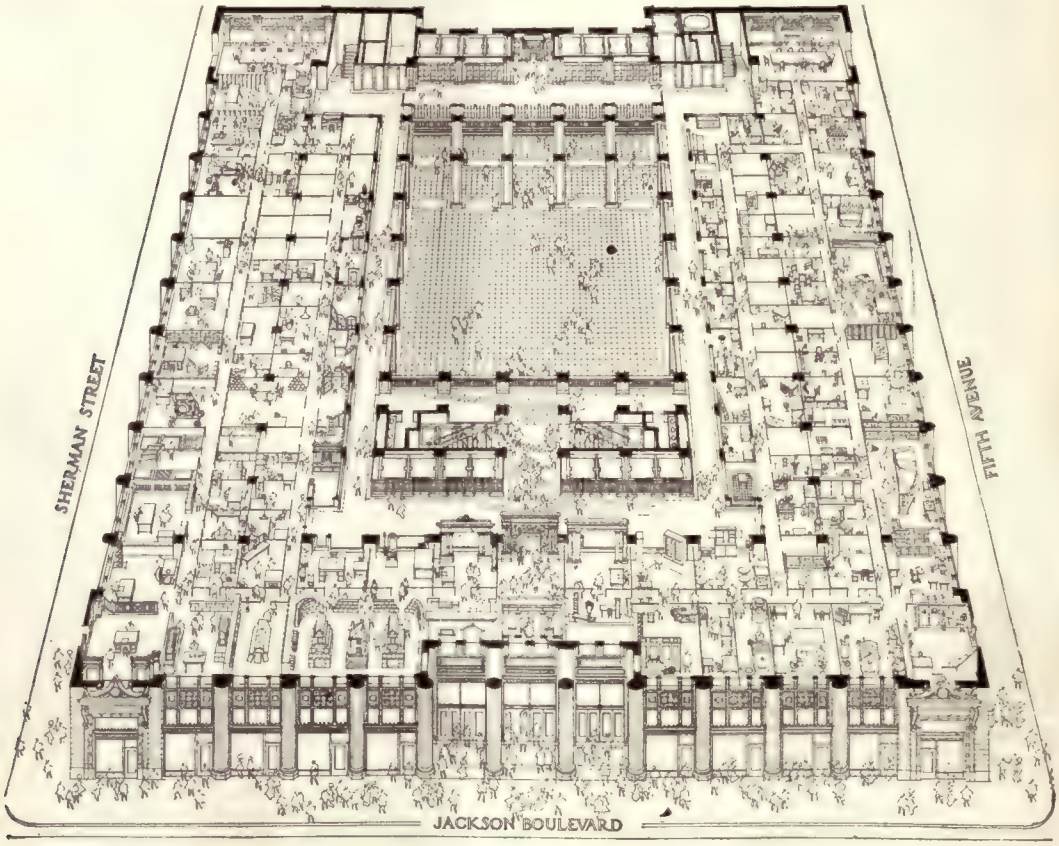
AND NOTES ON

Heating, Lighting & Plumbing

Permanent Building Material Exhibit.

SUPPOSE the prospective home-builder were able to visit the factories where he would find the various materials set up as they would appear when completely in place in his home; that he could examine the details of the installation, and of the material. Suppose also that the factories of the similar materials, between which he must make a choice, were located next door to each other, with some one ready to show him the advantages of each.

This is the condition which the permanent Building Materials Exhibit has for its aim. Only a good material dares to face its competitors in this way, so the standard for the exhibitors is kept high.



Birdseye view of the exhibit in Chicago.

Such exhibits have as yet been established in only a few cities, the most notable one being in Chicago. In New York there are a number of permanent exhibits of building materials, notably the one in the Woolworth building; architects' samples in the Architect building on Park avenue and the Craftsman Exhibit, but these are not so wide in their scope.

Permanent exhibits including all classes of building materials have been installed in Chicago and Minneapolis and other exhibits will doubtless be arranged as they are demanded.

These exhibits occupy an entire floor of one of the big new buildings; in Chicago the Insurance Exchange, and the Soo building in Minneapolis. The accompanying cut of the Chicago exhibit gives a good idea of the way materials are arranged. The exhibits are installed in booths generally with only a low rail separating them and with attendants and a regular office service in each booth.

When the homebuilder enters the exhibit he sees, in one alcove the brick which he wants for the basement course, also brick for the fireplace all laid up showing the changing effect produced by the color of the mortar and width of joint as well as by the bond in which they are laid. He sees how the brick will look in the wall. Beyond are samples of cement or stucco. He may choose the color and the surface and get minute directions for reproducing them. He may see all kinds of woods with all kinds of finish. He may examine the different furnaces, vacuum cleaners, hot water heaters—everything in fact that he wishes for his new home.

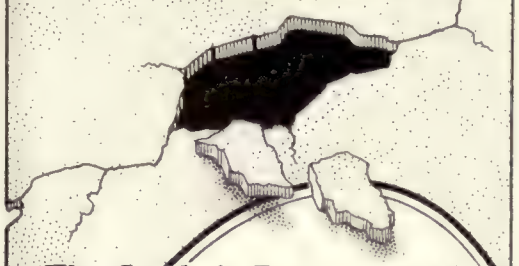
In addition to that he may bring or send his drawings and get estimates on the materials which he expects to use.

Here the owners, architects, contractors and builders will conserve their time and energy,—they will select more advisedly from a greater variety,—make closer, more intelligent comparisons,—effect economies and keep abreast of the latest ideas and developments, but perhaps it is to the homebuilder who is near enough to visit one of these exhibits that the greatest benefit ensues.

Sanitation.

In household affairs Domestic Engineering is the newest science. It com-

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CHICAGO, ILL.



prises plumbing, heating, lighting, cleaning and ventilation. Of all the sciences this is perhaps the most important for on it hangs the health and happiness of the nation. It means human comfort, and comfort means efficiency and length of days.

The modern plumber has become an expert in applied sanitation. If he takes a broader view of his business than simply making his plumbing lay-out as it is done "in the trade," seeing that the joints are tight and the connections good, if he knows why he does these things and the relations of one requirement to another, we call him a sanitary engineer. But whether we call him a sanitarian or a plumber, to him we must entrust the sanitary conditions of our houses. It is almost impossible for the usual householder to get information on the subject. The fixtures, as he looks at them in the shop, are merely pieces of furniture. Why is one type better than another? What do the differences in the price stand for, and what will they mean after installation. The dealer, when these questions are put to him, gives answers which one often feels ought to be convincing but—they leave only a hazy impression.

On account of this lack of general information, the building ordinance of the community carries additional responsibility. A plumbing job is laid out in conformity with the requirements of the local building code. Building ordinances are generally prepared by the city aldermen—lawyers, bankers, politicians, builders or bakers, as the case may be. They are prepared by an adjustment of the data on the subject, which has been sent in to them.

The idea seems to prevail that the greater the requirements, the better the job of plumbing must be. There is a very strong feeling in the east that our established systems of plumbing should be simplified, that when a new idea and device is added from time to time, some of the older ones may perhaps be dropped. One of the elements of plumbing is the water seal in the curved body of the trap for each fixture. If the water be siphoned off or evaporated, the seal is broken and the air from the pipes has free access to the house. It is claimed that certain applications of back venting tend to evaporate the water from the seal. The ordinances of certain cities require an elaborate system of back venting. Other cities do not require any. A number of cities including Washington and New York require house traps, or as they are often called, main traps in the house sewer. Other cities, including Chicago, prohibit these traps.

Our living conditions have changed vastly in the last thirty years. In New York City, thirty-one years ago, the mortality rate was 27.5, as compared with 14.1 in 1912. In Chicago for the same period it was 21.5, as compared with 14.8 in 1912. In Philadelphia the rate was 22.3 in 1881 and 15.1 in 1912, and in Boston 24.7 in 1881 and 16.2 in 1912.

This decrease in the mortality rate is the effect of many improved conditions. But it seems to be generally accepted that the factor which heads the list of death preventing agencies has been the installation of sanitary plumbing in all its phases, and the enforcement of the laws relating to it.

Sanitary engineers, with a faint echo from the public, are asking for a national or at least a state plumbing code, which should be prepared by those who understand sanitation, and are unbiased by local interest, and which should cover the fundamental principles. No one doubts that there is an accurate science underlying sanitation, and that its principles should be set forth.

Ohio and Wisconsin have plumbing codes which are highly commended, other states have been considering them. There seems no reason why many of the requirements should not be standardized, especially as plumbing manufacturers are often national in the territory their products cover. The sizes of soil, waste, and vent openings suitable for requirements in Chicago would be just as necessary in St. Louis and San Francisco. A standard for depth of seal for traps is also important.

Foreign visitors as well as returned travellers tell of the advance America has made in these matters beyond that of European countries. It is said that Emperor William of Germany recently issued an order forbidding any of his royal household to visit homes or castles where sanitary plumbing had not been installed.



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We will send the whole outfit, made to your measure, freight prepaid. Set it up and use it till January 1st; if it doesn't please you in every way, meeting every expectation, send it back at our expense and the banker will then return your money. Isn't that a pretty safe proposition?

Ask us for more information and booklet. Send us a sketch of your house and let us tell you how we would heat it and what it will cost.

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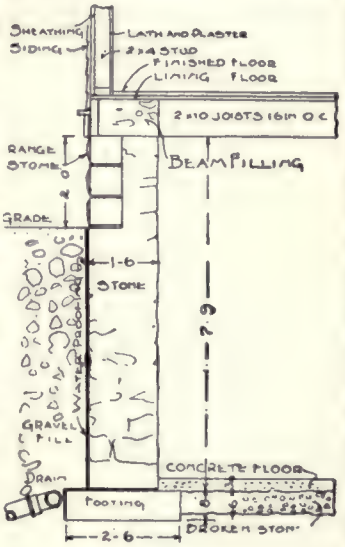
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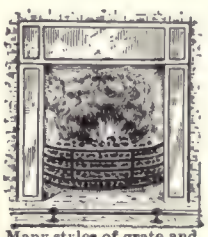
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(Fig. 6)
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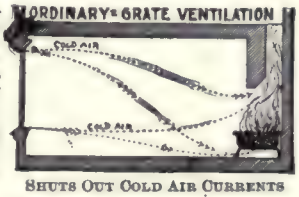
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is as beautiful as the most artistic ordinary grate and affords the same sense of coziness and cheer; but it ventilates, not dangerously, with air drawn across the room from door and window cracks, *cold,* but healthfully with air drawn in from outside thru a fresh air duct, circulated around the fire and sent into the room thru the register over the arch, *fresh but warmed.* Gain comfort and save money by investigating. Any mason can set it up from our *Complete Plans Furnished Free.*

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Hidden Stairway.

C. E. S.—I wish to ask your advice on my plan for a house, especially the "hidden stairway" for a house of this class. I want a central hall and also want to keep my house compact, yet roomy and comfortable. I thought of having my stairway in the rear of the hall, so that a back stairway would not be needed.

Ans.—In answer to your inquiry regarding "hidden stairway," I wish to say that in my judgment this scheme makes an exceedingly practical stair and under proper architectural detail could be very attractive, even though it is hidden as you say.

The start of the stair would show and the rear portion of the hall containing it really becomes a "stairs hall," which would be more pronounced by throwing a beam across the ceiling between den and stairway.

Sheathing and Metal Lath.

J. S.—I intend building a small house in the country, the exterior to be stucco on wire lath with timbers showing. Is it practical to put the cement mixture for the wire lath with nothing on the back?

Ans.—You have written us concerning the subject of proper method of using metal lath and stucco finish on a residence.

This subject has been very fully covered from time to time in KEITH'S MAGAZINE and I presume you have overlooked these articles. As I understand your question, it is whether a frame house will be sufficiently strong and durable if the wire lath is put over the studding without enclosing the house in sheathing boards. It would not.

A very small summer camp could be constructed this way providing that the studding was put a little closer together than it usually is placed, but as a general rule the building requires the sheathing to give it the necessary rigidity. The metal lath can be nailed directly onto the sheathing boards, but it is much better to use an inch or inch and a quarter furring strip set about 16 inches on center and stretching the metal lath over same. This gives you the inch air space between the outside plaster and the sheathing boards.

Treatment for a Brick Mantel.

A. D. F. Archt.—Woodwork in this living room, including beams, are light tobacco brown. The fireplace is all in birch and is massive. It is cream pressed brick with black iron spots. The mortar has been darkened with lampblack until it is a slate color; hearth about color of woodwork. The walls above panelwork are apple green; ceiling cream. This room is to be redecorated, leaving woodwork as it is. The lady wants to paint this mantel red and make walls cream. I built this house and think that to paint such a mantel is wrong. It is modern and well done. They are tired of the green wall and want cream and are afraid the mantel will not stand out in contrast.

Please suggest a proper treatment for this room. There is no change in dining room, which is apple green.

Ans.—We agree with you that it would be a grave mistake to paint the brick mantel, and a terrible one to paint it red. The iron spots in the cream brick together with the dark mortar will sufficiently differentiate it from the wall. We think that this mantel taken in connection with the brown woodwork, beaming and paneling, will make a distinguished and effective room, if the plaster between panel strips be covered with dull old gold burlap or grasscloth and the wall above painted deep ivory. The cream ceiling can remain. Keep the room in these tones of brown, dull gold and ivory—and it will be refined and unusual. The rug should be in brown and cream with some rose—the draperies old gold.



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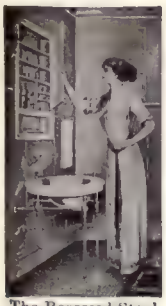
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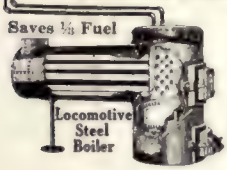
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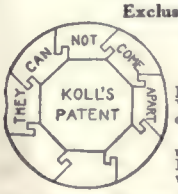
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WOODS AND HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

A New University Extension Course on Lumber and Its Uses.

A LARGE proportion of the labor in this country concerns itself in one way or another with the working of wood, in some of its forms, with the handling of lumber, of wood, or of some of their products. Many of these industries require a most discriminating use of the material. Yet the amount of information available on the subject is absurdly small. To the student or young craftsman there is no way to obtain any systematic information on the subject in general. The more or less experienced man, who may wish to know more about the individual qualities of the woods he is called upon to work, must acquire his information by the slow and perhaps bitter experience.

The University of Wisconsin is the first great institution outside of the federal government to recognize the true state of affairs and to put forth an effort for its correction. The Extension division of the University has announced a correspondence study course in "Lumber and Its Uses," which is the first of a series of courses which are being planned for those engaged in the wood working industries. This is the first course dealing with lumber ever offered to the general public in the United States. The course has been prepared for this work by one of the best authorities in this country and is planned to be of especial value to lumber dealers, contractors, carpenters, and all others whose work relates to the use of this important material.

The assignments for the course, based upon a text book and other printed material, are as follows:

1. The Structure of Wood. Porus and Non-Porous Woods, Springwood and Summerwood, Sapwood and Heartwood, The Figure of Wood.

2. Physical Properties of Wood. Softwoods, Hardwoods; Useful Properties, Weight of Different Woods, Bending Strength, Crushing Strength, Tensile Strength.

3. Physical Properties of Wood. Stiffness, Toughness, Hardness, Effect of Moisture, Shrinkage.

4. Standard Grades and Sizes. Purposes, How Established, How Maintained, Principal Systems, Nominal and Actual Dimensions, Shipping Weights.

5. Structural Timbers. Specifications of Manufacturers, American Society for Testing Materials, U. S. Forest Service, Definitions of Defects.

6. Seasoning and Preservation of Timber. Air Drying, Kiln Drying, Wood Preservation.

7. Paints and Stains. Purposes, Composition, Methods of Application, Adaptations to Specific Woods.

8. Lumber Prices and Cost of Wood Construction. Comparison of Lumber Prices with Prices of Other Commodities, Comparative Costs of Building with Lumber, Brick, Stone, Stucco; Standard Mill Construction.

9. Specific Uses of Woods. Lumber Production, Woods used for Paving Blocks,



The Cost Is Small, Mr. Builder

For the many valuable suggestions you can receive from the plans, editorial matter and advertising in every issue of the National Builder.

It is to your interest to know about the quality and prices of the many different materials—both old and new—that you will buy when building or doing repair work.

The special feature of this magazine is a complete plan 24x36 inches, drawn to scale. This may be a house, bungalow, barn, two-flat building or double house. They are the same as an architect's blueprint and show front, side, rear elevations, floor plans and details with complete bill of materials.

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in the practical, easily understood articles on building construction and *the many pages of reliable advertising.* This advertising will introduce you to the best of the old standard materials and tell you all about the newer ones, which in many buildings replace the others, at greatly reduced costs.

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It has taken home-builders of America by storm, for it is the modernization of the wonderfully beautiful roofs of historic Spanish edifices.

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After years of experiment, we have hit the solution. That is why today we are able to offer American homes the amazing attractiveness of

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Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

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10. Selection of Material to Build a House. Kind, Quality and Cost of Framing, Sheathing, Siding, Shingles, Flooring, Interior Finish, Doors.

The Discovery of Mahogany.

Like the use of a great many of the factors connected with the arts and the sciences, the discovery of the beauty of the grain of mahogany for furniture was accidental, says a London contemporary. The story goes that a certain West Indian captain who had brought back to England some planks of mahogany as ballast, decided to give the wood to his brother, a Dr. Gibbons, then building a house in King Street, Covant Garden. But the planks were so hard that the carpenters objected, and the plan for using them fell through.

Some time later, Mrs. Gibbons wanted a small box made, and the doctor sent the mahogany to a cabinetmaker. In his turn the cabinetmaker objected to the hardness of the wood, but the doctor persisted so much in his request that the order was finally executed.

The finished box polished so nicely that the doctor ordered a bureau made of the same wood. The cabinetmaker displayed that in his shop window before delivering it. The Duchess of Buckingham saw it and begged enough wood from the doctor to have it duplicated, and mahogany furniture soon after came into favor.—*Building Age.*

Question Answered.

W. G. W.—I am promptly accepting your invitation in July number for information from your wood experts.

I would like to know what is best to use for piazza floors? Most people here use hard pine; we expect to, but our contractor says cypress painted will outwear any kind of wood. We considered cypress too soft for flooring. Please tell me if it would get splintery? It would cost $20.00 more than hard pine, which is only a trifle if it is really the best to use. If there is a still better wood for outside flooring, please tell us. We have our choice of red birch, maple or hard pine (best quality) for living room, hall and dining room floors.

Please advise us the relative differences of these woods. All the interior woodwork is cypress. Is Washington fir good for porch pillars and doors?

Ans.—You are to be congratulated on the care you are exercising in selecting the material for your home and on the fact that you realize the very slight difference in the cost of the raw material is not a matter of very great importance compared with the value of what you secure.

Wood makes the best floor for the piazza and this problem is merely to select the best wood for this purpose.

If you can secure 2¼-inch face quarter-sawed heart Cypress it will make you a very good floor and will last fairly well. It is, of course, much softer than either Long Leaf Pine or Arkansas Soft Pine and will not resist so much wear. You should not use flat sawed flooring under any circumstances.

Probably you will secure more service by using all heart edge grain 2¼-inch face B. & Better Arkansas Soft Pine, Long Leaf Pine or Douglas Fir. Have the contractor insist on being supplied with the exact length of flooring that will be used; that is, do not permit him to splice two pieces to make a length.

The life of the floor will be increased if, before it is laid, you will have the grooves filled with thick white lead and laid while the paint is wet. That will give you a floor that is practically waterproof, provided the surface is primed as soon as finished.

The Arkansas Soft Pine and the Fir will hold paint better than the average run of Long Leaf Pine; they contain less pitch. Long Leaf Pine, however, is harder and will stand more wear.

Hard pines are what may be termed laminated woods. That is, they are built up of alternate layers of hard and soft wood. Birch and Maple are solid formation and ordinarily will show less wear than the pine. Birch flooring will take any stain treatment you care to give it and can be finished to harmonize with the woodwork.

Washington Fir, or Douglas Fir as it is also called, is good for almost any purpose you elect to use it. It is being used extensively in the manufacture of porch pillars or columns and doors.



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SPLINTERS AND SHAVINGS

Influence of Indoor Living.

MAN, like a horse, is naturally an outdoor creature. As the race has been crowded north toward the frigid zone, houses that will protect from the cold and the storm have become a necessity. The tendency of the age toward concentration of the people in cities tends to make man an indoor creature," says Dr. W. A. Evans in the Chicago Tribune.

The primitive man of the far north is small in stature which must naturally be credited to the bad living conditions under which they spend so much of their time. Progressing toward the south the aborigines are generally larger with better physique. The American Indian is well built. The negro from Africa is larger.

English and American Housing.

Some rather interesting points were developed in the course of the discussion on housing at a meeting following the visit to England, which the National Housing Association organized last summer, to study the work there. In the discussion of the human side of the problem comment was made upon the very small number of aliens in the English slums and the homogeneous character of the population in the garden suburbs and municipal dwellings. This is in wide contrast to the diversity of nationality in the crowded sections of American cities.

The effect of the management on these communities, whether municipal, co-partnership, real estate interests, or a garden community was considered, and followed by a discussion on house plans from the tenant's point of view, and recreation in the garden communities. The single family house, rather than the multiple dwelling, met with unanimous commendation, but when it came to interior arrangements the conference felt that America had more to teach than to learn. The success of the English in providing for wholesome recreation in their garden suburbs and villages, however, was held up as something for us to emulate.

In a survey of housing conditions in Philadelphia with relation to causes, a study of the effect of improvement upon rents proved the fallacy of the statement that sanitary betterments have their reflex in additional cost to tenants. An investigation into the effect of home ownership upon citizenship revealed that where the percentage of privately owned homes is high the congestion is least, the death rate usually lower and incidentally the greatest independence in politics manifest.

To Arbitrate Labor Questions.

The Builders' Exchange of Philadelphia recently organized an advisory board, composed of representative men from the different building trades men who are familiar with the trades organization and their workings. The duty of the board will be to hear and settle, if possible, all misunderstandings in the building trade and to avoid loss of time for the employed and loss of money for the employer as the result of strikes. The board is composed of men from the Builders' Exchange, master plasterers, roofing and sheet metal contractors, Bricklayers' Co., Master House Painters' Association, Master Tin and Sheet Metal Workers, Mason Builders' Association, Master Carpenters, Master Stone Cutters, Lumbermen's Exchange and the Granite and Blue Stone Cutters' Association.

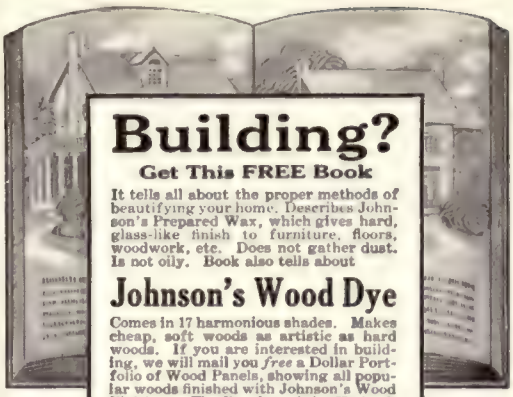
What Paint Will Do.

Ask any real estate man what percentage of value is added to a house by a fresh coat of paint and you will be surprised at the size of the figure he will give you. Many householders have the habit of putting off painting until a house fairly screams for it—and they perhaps figure that they are economizing. Not so. Good paint, applied at regular intervals not too far apart, is the true economy in that it not only actually raises the value of a house by improved appearance, but through preservative in-

gredients, prevents and arrests decay. The man who lets his house become an eyesore in an otherwise well-kept locality should be taxed for the heavy damage he is doing to that community.—*National Real Estate Journal.*

To Make a Kitchenette.

When living in very small quarters and desiring kitchen conveniences in order to entertain occasional guests, or to get one's own breakfast, a closet that is not needed for anything else can very readily be converted into a kitchenette. Have a deep shelf put in at a convenient height on which to place a gas plate or tiny gas stove, which may be connected with the gas fixture in the room. Cover the walls with white table oilcloth. The shelf may be covered with oilcloth or with zinc. Around three sides of the closet have shelves placed at about the height of the head, yet easily reached, to hold necessary supplies, with additional shelves at one and for dishes. Hooks should be placed under the shelves for cooking utensils preferably. A small piece of linoleum will be sufficient to cover the floor.



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New Booklets and Trade Notes

YOU can control each radiator separately by an individual Kelmac graduate valve, according to the beautiful little booklet just issued by The Kellogg-Mackay Company.

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Send your building plans and they will confer with your nearest reputable contractor and he will furnish you with an exact estimate of the cost for installing Kelmac Vapor Heating System.

The Vacuum Heating Company, of Philadelphia, have issued a pamphlet descriptive of the Mercury Seal Apparatus, for use with any system of heating which requires a regulating device for controlling the supply of vapor or steam to radiators.

The air is ejected from the system through a seal of mercury, but it can not return because its passage is trapped by the mercury reservoir in the bottom of the seal. They claim that by checking the fire the apparatus can be run into a vacuum so that the steam expands and heats a much larger radiator than would be possible otherwise. They invite correspondence regarding either the apparatus or the engineer data necessary to its use.

The days of the good genii and fairies are supposed to be past, but their gifts are still with us. We set a little pointer on the wall and our rooms are kept at an even temperature all winter, only that the genii refuses to shovel coal. This is what the Minneapolis Heat Regulator Company has put at our disposal. It is only necessary to keep fuel on the fire, and to wind the clock. This is not a new thing, having been in service throughout the country for twenty-seven years. Now an eight-day clock attachment has been added to their thermostat. They also announce a new model, No. 35, with one-day time attachment. The motor is of the gravity type.

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KEITH'S MAGAZINE ON HOME BUILDING



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What may be done with Wysteria.

KEITH'S MAGAZINE

VOL. XXXIV OCTOBER, 1915 No. 4

The Modern Wayside Inn

How to Turn a Neglected Farm House Into An Attractive Money-Making Tavern, and Do It Cheaply

William B. Powell

IT is rather surprising that more people do not appreciate the value of opening a Wayside Inn or Country Tavern at convenient motoring distance from town. England, France—in fact nearly all European countries—are dotted with wonderfully attractive little places where one can stop in for daintily served afternoon tea, or a good country dinner. These places are nearly always very simple and usually tiny. They are not elaborate or expensively furnished—and this is a point which Americans ought to remember. We are so prone to think that a restaurant or even a house must have a lot of money spent on it if it be attractive. It is so easy to fit out a little tea room inexpensively. What is



A wall or ledge screens your lawn from the roadway.



The porch may be utilized as a dining room.

more, if the proprietors have any business ability, it will net them a nice profit.

I know of three college girls who opened a small inn about ten miles from a large city and took in a splendid income every month from April through October. I know of another tavern situated about twenty miles from the same city and here



The office seems like a room in a private house.

a young couple, who run a small farm in conjunction with it, make a nice sum the year around. This couple took an old place which had been used as a stopping place in the old stage coach days, and by putting a thousand dollars and plenty of taste and common sense into its reconstruction, they have evolved one of the most popular inns in that section of the state. A tennis court and access to the golf links of a nearby town, make this place very popular for week-end parties. In winter the court is flooded for skating and the surrounding hills are attractive to lovers of coasting and skiing.

There are many of these little places throughout New England, but the rest of the country has yet to get enough of them. Too often the motorist finds himself in prosaic surroundings for his meals. An attractive inn furnished with taste and possessing that much desired element "atmosphere," will be readily patronized and will easily pay for itself.

Why not get a few people together and by each one putting in a little money and contributing a few pieces of furniture, china, or linen, start up a wayside inn? Select a farm house or cottage that is located on a popular highway and if possible at a distance which will catch the trade of several towns. In renovating it, don't be tempted to spend too much money nor be side-tracked from your undertaking on this account. These stopping places do not have to have every modern convenience—in fact, you will find that many people would much prefer candle light to electric, and open fireplaces to steam radiators. Shower baths



The living room is a very attractive tea house.

will satisfy the guests and old-timey wash stand sets will do very nicely in the simple bedrooms.

I shall give you some hints for fixing an inn, many of which will be just suited to a place that you have in mind. Even if you or your friends are not interested in such a proposition, many of my suggestions are just as applicable to private homes as to public hostelries.

lawn from the roadway and make it an attractive place for tea on a warm afternoon or for supper when the twilights are sufficiently long. You will note the wall of rough stones, the graceful trellises and arches, and the bird houses in the photograph shown, all of which add to the garden's attractiveness.

You can obtain more dining room space by utilizing a porch. Screens, plain grass



A good way to treat a low ceiled room.

In regard to the exterior, I suggest the liberal use of white paint. Almost any place will look inviting to passersby if it is painted white, with green shutters. You can't go wrong with this combination. Of course trees, a well-kept lawn, flowers, awnings, pergolas, etc., are great additions. But these things add up the expenditures, and if you go into them, you must keep your eye constantly on your money.

A stone wall or hedge will screen your

rugs, painted iron furniture and plenty of hanging baskets are all that are necessary to gain an appetizing eating place overlooking the garden.

These little taverns do not require a regular office—I have one in mind where the corner of the main room or lobby is the only "office" used. The small counter, candy and cigar stand are the only things which need suggest a public place, and these need not be emphasized. The old-fashioned, bright hollyhock paper

makes the office of one wayside inn seem more like a room in a private home, which, by the way, is the effect you should strive for in planning the decorations

The main room should, if possible, have one or two open fireplaces as they will add greatly to the livability of your place. With the furniture grouped about the fireplace the guests will enjoy the cheery, homelike atmosphere, such as only a crackling log fire can radiate.



A certain tavern has renovated the old attic for a ball room.

The living room of an exceptionally attractive tea house is shown in the photograph. The walls were painted a warm, light gray with modern "flat" wall paint. The woodwork was painted ivory—also with "flat" paint. The old floors were left the same and a cheap but effective bright green grass rug was used. Except for the big comfortable couch, the rest of the furniture is wicker, or else plain, unfinished pine which has been painted black. The room can stand plenty of black because the chintz hangings have very vivid coloring and some of the upholstering and pillows are of bright colors. A novel effect has been obtained by cutting out certain patterns from the chintz and appliqueing them on black denim pillows. These designs have also been pasted on some of the black furniture, with over it a coat of shellac or water-proof varnish. In the case of tables a piece of glass was used instead. Electricity and heating was put in this tea house, although it is not necessary unless it is to be kept open until cold weather.

Another good way of decorating a low ceilinged country room, whether it be for an inn or private home, is shown by the accompanying photograph. The effectiveness of this treatment depends solely on the design of the wall paper and the coloring used throughout the room. The old-fashioned, plain-tiled mantelpiece has been left as it was and the woodwork painted a pure, glossy white. The predominating colors in the paper are mauve and old blue, the latter color being used for the curtains and upholstering of the wicker furniture. High glass candlesticks with prisms add an old-timey touch.

If you want to go to the expense, you will find a ballroom has additional value in these days when dancing is so popular. A certain tavern, which is simply a renovated farm house, has its ballroom made from the old attic. The walls were plastered, new wainscoting and flooring added, but the beams were left intact, except that they were stained a dull green to match the new woodwork.

The bedroom problem is a very simple one. With paint and varnish, chintzes, old-fashioned wall paper (which can now be obtained cheaply) you cannot help but have attractive rooms. It is here that you can use your odd pieces of furniture and by staining or painting them make them match to form sets.

If you are an owner of an empty farm house or a motorist who longs for an inviting place to eat after a good run—why not interest yourself or some of your friends in this Wayside Inn idea?

The Maryland Cottages

"Such stuff as dreams are made of."
—Shakespeare.

Henry K. Pearson

THE Maryland cottages are famous. No one ever goes to Pasadena without going to see these charming cottages. "Dreams" they truly are; dreams in plaster and tile, all broidered and garlanded with trailing ferns and vines. Mr. Myron Hunt, the noted California architect, dreamed to some purpose when his fertile brain evolved these fair visions which have been materialized and embodied in plaster, brick and wood.



In the court stands a magnificent camphor tree.

The cottages with the courts and gardens they enclose, occupy a whole block of ground in the rear of Hotel Maryland and are part of that property for the accommodation of guests who desire quiet and retirement. In a general way, they are designed in sympathy with the architectural composition of the Maryland itself, which is unique among hotels. But the fertility of the architect's brain is shown in the variety of designs, for each one of the twelve cottages differs in its detail and in some essential feature from all the others.

The marked characteristics of the hotel exterior—the white plaster surfaces, the



The automobile entrance to the court.

columns, the pergolas, the wreathing vines, are reproduced in the cottages; but are so combined and so infinitely varied as to leave no impression of sameness or monotony. A noticeable feature is the utter absence of the bungalow type. To build a group of one story cottages, in a land of bungalows without making use of



Brick is cleverly used with the plaster.

the bungalow idea, is certainly a notable achievement.

The illustrations presented show the inside facades of some of the cottages as they face the great central court with its flower bordered walks, its velvet sward, its pergolas and fountains, its beautiful plants and flowers. Through a wide window, we get a view from the inside of one of the cottages, looking out upon the space between two of the dwellings, with its wealth of flowering shrubs between the vine-draped walls.



View from a window.

In the center of one of the general inner courts stands a magnificent camphor tree; a great branching pepper, with its graceful, drooping sprays occupies a similar position on the other end. From the street side, the purple mountains rise before us, mysterious, alluring,—a wonderful vision. Surely, the California architect must needs be a dreamer of beautiful visions, to live up to the settings Nature gives him here. As one walks along the street side of these charming dwellings, suggestions follow quickly upon the heels of vision. Here high walls 8 feet from the sidewalk in places, shut out the too inquiring gaze. But these walls are hung with a wealth of foliage—ivy and the pink and white loveliness of the Cherokee Rose, which

"either side the door were
Growing lithe and growing tall
Each one set a summer warder
For the keeping of the hall—
With a red rose and a white rose
Leaning, nodding at the wall."

The Ficus Ripans creeps in and out among the ivy and the rose vines, broidering its lacy patterns on the plaster walls; ferns fill the boxes at the top of the parapet walls and bend over them. A dwarf orange tree stands green and glossy and straight in each corner of the walled garden. Vine-wreathed casements open out on them from above and upon the pink geraniums and myrtle below, while the dark greenness of the ivy runs riot everywhere, over

"Arch of door and window-mullion
Did right sylvanly entwine"

Thus the street side of the cottages, almost overhanging the sidewalks, as they do, are given an alluring grace while so arranged as to shut out the gaze of the passer-by. One is reminded of the old Creole mansions in New Orleans, except that here is none of the frowning severity of the high walls and closed gates. The sense of privacy and of seclusion is here—but here the court yard smiles at you from between the walls, the garden beckons through the columned openings and vine-covered trellisses.

There is a finely molded cornice here, a rounded column there, narrow slits of minaret and windows high up in a gable give a touch of romance. There is a glimpse of a pink oleander above the top of the wall. These are the things that make up the interest and the charm of the Maryland cottages. And from there, one carries memories which may be fertile in suggestions for other cottages in other scenes.

Two Women Architects

Virginia Shortridge

Having received the technical training, a woman should know how to build a house. His home may be a man's abiding place, but a woman lives in her home and its smallest details are momentous to her. As women are gradually entering the various professions and lines of business the woman architect is becoming known. Some enter the profession as do many men from some other door than that of the school. While a large proportion of women architects have had the best available school training, a few begin as draughtsmen and "graduate over the drawing board" as do so many men in the profession. A few first take an interest in plans and elevations through building which is done for them, and which rouses their enthusiasm and ambitions.

This article continues "Two Women Architects," begun in the September number, concerning the firm of Lois L. Howe & Manning, Architects, of Boston, and their work. Miss Manning began her career as a draughtsman in Miss Howe's office, and has continued it with study and travel.—*Editor.*

EVERY line in the composition of the elevation for a house should lead up to the central idea of home and there should be unity and harmony in the exterior, as well as practicability and proportion in the interior planning. One can not put a number of radical forms together that have no relation to each other, nor to the whole construction and achieve satisfactory results.

In beauty and character lie the gist of all design. Technical conditions if fully understood, fairly met and frankly acknowledged, are sure to give character to a design; and these conditions were met by this firm of women architects when cutting through the two fine old colonial houses in Park Street, Boston, to make a connecting floor for new kitchens and dining rooms in the reconstruction of these houses for the Mayflower Club.



A small dining room in the Mayflower Club.



A house in Brookline.

The view of the small dining room of the Mayflower Club shows the fine colonial treatment carried throughout the club rooms.

The house in Brookline which is shown is very simple yet charming, with its stucco surface, and charming glimpses of glassed in porches through the clambering vines. The setting of a house, the frame in which it is seen, counts for as much in a community, oftentimes, as the beauty and fitness of the building itself.

"Each for all and all for each other" is what the owner of a new house should bear in mind. In this young country with the inartistic laying out of village and country streets resulting from the absolute lack of thought in the matter, the many pretty houses are often like good pictures in poor frames.



The dining room gives a charming vista.

Then the exterior coloring of a house makes for pleasure. Since color - vibration stimulates, depresses, enervates or uplifts why forget the importance of this when building?

Many people are as sensitive to color as to sound, and are made wretched or happy by its use.

Miss Helen Keller, the deaf, dumb, and blind

girl, has among her other wonderful achievements the knowledge of color by touch and has tastes more strongly developed than the average human being who has all his senses. She knows by her sensitive touch the color of her dresses, whether blue or black or brown, and she can pick a white rose or a pink rose in her garden, with never a mistake. She will, they say, do more. She will enjoy the pink one for one quality, the white rose for another.

it. The fireplace, too, is on the simple lines of the colonial days. It is a room where a child may feed his dreams with fairy tales on a rainy day, with a sun room beyond for the crisp winter mornings.

Concerning modern conveniences and the lack of them in England, Miss Manning commented on the seeming ease with which the English matron gets along without them. During a somewhat prolonged stay in England, quite recently, she was greatly puzzled on noticing that,



Chintzes give a touch of color in the child's room at Wonolancet.

Gay chintzes give a touch of color to the group of interiors at Wonolancet, Knollcroft, New Hampshire, which are here shown. The rooms are very dainty and charming. The view of the dining room gives a charming vista as seen through the open glass doors. As in so many New England houses, the fireplace end of the dining room is panelled to the ceiling. The fireplace itself has a very simple colonial treatment, with a single white panel over the chimney breast. The child's bedroom at Wonolancet is wonderfully attractive with its group of small-paned casement windows and the brightly colored chintzes as well as the comfy, cushioned window-seat beside

whereas English homelife may have given us the model of what sweet domestic living can be, our English cousins have been able to produce this perfection with so few of the modern contrivances deemed by us to be essential attributes to the comfort of any home. At many well served luncheons and dinners where she was among the guests in London, not only was there no butler's pantry, but it frequently happened that there was also no lift. The perfect smoothness and quiet gave visible proof that such deeds of courage were daily accomplished without the knowledge or the lack of contrivances for comfort which are found in very small apartments of exceedingly low rent and



With a sun room beyond the child's room at Wonolancet.

which are usually required in America.

The Lynn house, Miss Manning has placed charmingly and its exterior will doubtless add new beauty as the landscape work matures. The house has dignity and charm, two of the great essentials.

Through all time the quest for beauty has spurred on the artist, the architect, the poet, to his greatest effort. But beauty is not easy to command. It is so delicate a quality,—so complex in its elements—a question often of such nice balance and judgment—that we can not weave technical nets to catch so sensitive a butterfly.



The Lynn house is charmingly placed.

Three-Story Houses for Less Than $5,000 Each

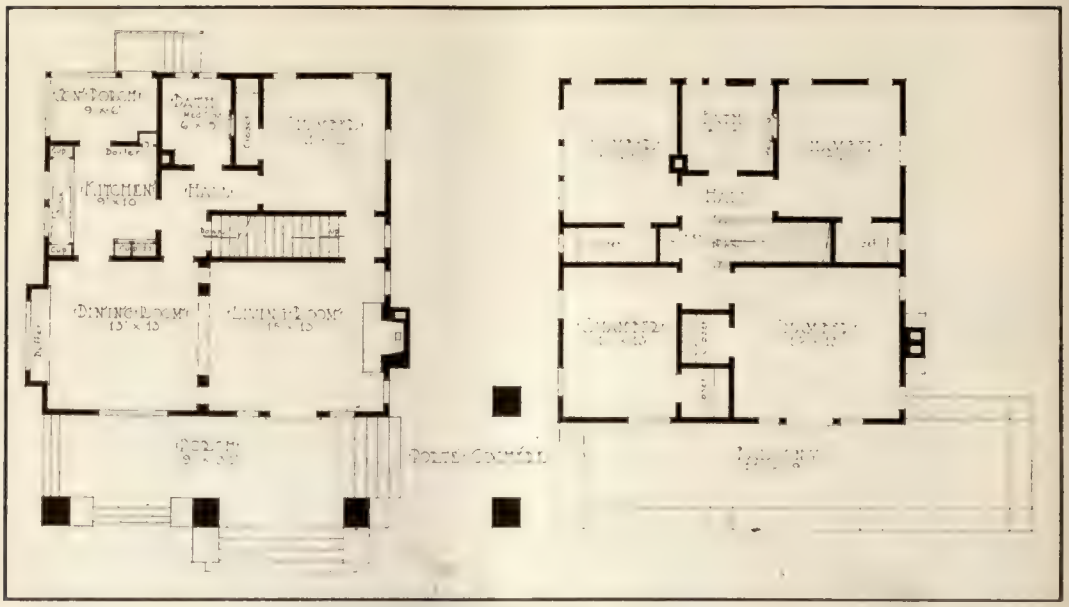
Charles Alma Byers

EACH built for less than $5,000, the three two-story houses here shown possess many points that should commend them to the careful consideration of the person who may be contemplating the building of a moderate-priced home, especially if considerable room be required. They are full two stories in height, and they are roomy and conveniently planned. Moreover, they are substantially constructed and modernly equipped, and they possess many special features, particularly of the built-in furniture kind, that will undoubtedly please the most exacting housewife. Being, also, of widely different designs in the matter of architecture, they afford a variety of choice that should assist very materially in enabling one to reach a decision as to the type of house most desired.

The first of these houses is of the so-called Mission style of architecture, and is the least expensive to build. It is dignified in structural lines, and is decidedly attractive in outside appearance. Its exterior walls are sheathed, which is covered with heavy building paper, and over this comes the metal lath and the cement plaster, the latter being of unusually excellent quality and virtually pure white. The center portion of the roof, which is quite flat, is covered with composition roofing, but the cornices, as well as the



It is dignified in structural lines.



miniature roof projection over the front steps, are covered with red tile. The porch railing, which is of wood, and the trimming around the doors and the windows, except the main entrance door on the front—which, including the casing, is of mahogany—are painted white, to match the cement walls.

A veranda, nine feet wide, extends across the front of the house, which terminates at one end in a porte-cochere. This veranda is floored with dark red cement, to correspond with the walks and the steps, and into one end of it lead steps from the porte-cochere portion of the driveway. Extending the full length of both the veranda and the porte-cochere, overhead, is an excellent balcony, which comprises an especially delightful feature and adding to the livable qualities of the home.

In the rear of the house is a small garage of exactly the same style of architecture as the house itself. Underneath the center of the house is a basement, which is walled with concrete and floored with cement, and a hot-air furnace located here supplies heat to the rooms whenever required.

The first floor rooms are living room, dining room, kitchen, bathroom and one bedroom, besides the usual rear screened porch, and on the second floor are four bedrooms and a bathroom. The living room possesses a large fireplace, mainly of tile construction, and in the dining room is found an artistically designed buffet, while each of the five sleeping rooms contains a roomy closet. A small linen

Estimate of Cost.
House No. 1.

Excavating	$130.00
Lumber	770.00
Sash and doors	125.00
Tinwork	40.00
Hardware	85.00
Hardwood floors	187.00
Furnace	125.00
Electric wiring	46.00
Electric fixtures	75.00
Carpentry	655.00
Masonry	180.00
Mantel	40.00
Plastering	560.00
Plumbing	425.00
Painting	300.00
	$3,743.00

closet is also a feature of the second floor hall, and in each of the bathrooms is a tiny medicine chest, while the kitchen possesses all of the customary conveniences. The staircase to the second floor makes its ascent from a short passageway intervening between the living room and the first floor bedroom, and the stairway to the basement descends from the hall leading off from the dining room. Incidentally, the sleeping room on the lower floor may be used either as a servant's room or as a children's nursery.

The woodwork of the living room and the dining room, which rooms are connected by a broad colonnade opening, is of pine given a mahogany stain and finished to be in keeping with mahogany furniture. The remaining rooms are finished in enameled white. The walls of the two rooms here mentioned and of the four second floor bedrooms are papered, and the walls of the bathrooms are finished with a hard-finished plaster wainscot.

This house was designed by the De Luxe Building Company of Los Angeles, California, and was built in that city for $3,743, an itemization of which is here given. It is warmly constructed, and should prove suitable for almost any lo-

The second house may be broadly described as belonging to the English school of architecture. It is a very practical type of house, and the representative of the style here shown presents a particularly attractive appearance. Resawed weatherboarding covers the walls of the first story and shingles those of the second, while the gables are of stucco finish, with half-timbered effect. The walls are painted green, and the trimming is done in green of darker shade, while the stucco is tinted a deep cream shade. The



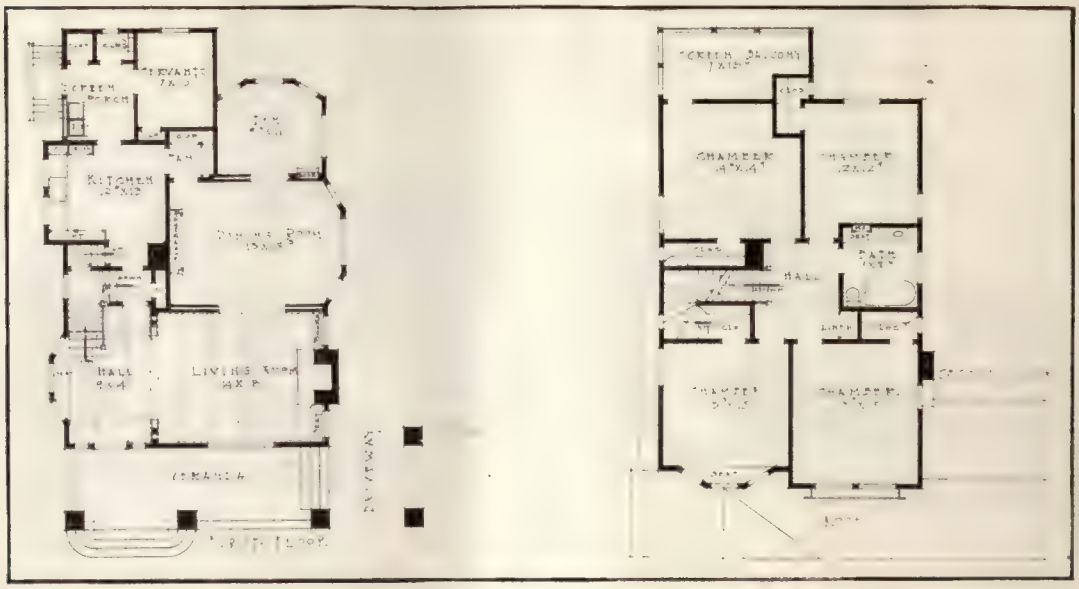
It is a very practical type of a house. *—Frank M. Tyler, Architect.*

porch masonry is of artificial stone, of a color to match the stucco; the chimney is of red brick, and the roof, also painted green, is shingled.

As of the first house, a deep veranda, terminating at one end in a porte-cochere, extends across the entire front. This veranda is floored with cement, and is covered by its own individual roof. It provides both a charming entrance and a delightful outdoor retreat.

Estimate of Cost.
House No. 2.

Excavating and masonry	$500.00
Lumber	750.00
Millwork	300.00
Sash and doors	370.00
Hardware	120.00
Sheet metal	150 00
Hardwood floors	200.00
Plastering	215.00
Plumbing	250.00
Carpenter work	950.00
Wiring and fixtures	200.00
Painting	375.00
Screens	25.00
Mantel	75.00
	$4,480.00



The interior of this house is especially well planned, and its numerous built-in features make it truly delightful. The plans will, in fact, bear the closest inspection, for it would be extremely difficult to improve upon the arrangement, size and cost considered.

The front door opens into an inviting entrance hall, from which rises the staircase. On one side is a bay of three windows, which possesses a built-in seat, and on the other side a broad colonnade opening, hung with portierres, leads into the living room, while from the rear end, at one side of the staircase, leads a passageway that connects with the kitchen and contains the basement stairway and a closet for wraps. The living room contains a fireplace, with a brick mantel, to the right of which is a built-in seat and to the left a built-in bookcase. Sliding doors separate the living room from the dining room, and a single door of the same kind intervenes between the latter and the den in the rear. The dining room possesses an excellent buffet, and the den has a built-in writing desk.

Between the dining room and the kitchen is a small pantry, with its cupboards, and from the kitchen rises a back stairway to the second floor. A servant's room comprises the remaining room on this floor, and off of the usual rear screened porch are a toilet and a storage closet.

On the second floor are four bedrooms, a screened sleeping balcony and bathroom. Each of the inside bedrooms has a large closet, the bathroom contains a built-in seat and a medicine chest, and hall possesses a linen closet, with shelves and drawers. One of the front bedrooms also has a window seat, located in a bay.

The woodwork of the entrance hall, living room, dining room and den is of pine, stained to resemble fumed oak in color. The ceilings of the first two are beamed, and the walls of the last two are finished with a paneled wainscot, with a plate rail above. The woodwork of the remainder of the house is enameled white, and the walls of the principal rooms are papered. Hardwood flooring is used throughout, except in the bathroom, where tile is used.

The house is heated from a basement furnace. It was designed by Frank M. Tyler, architect, of Los Angeles, Cali-

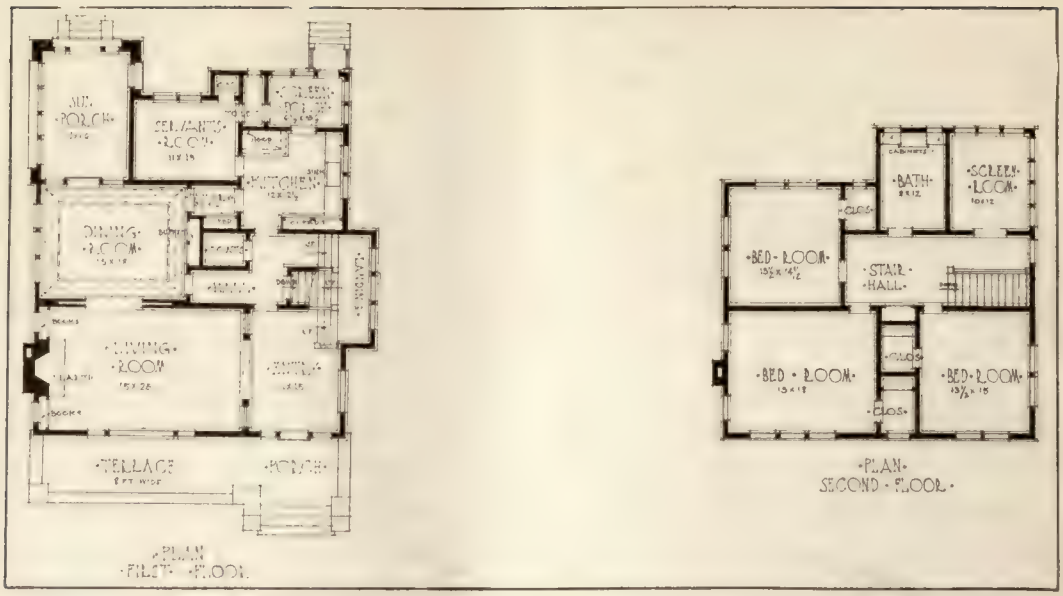
Estimate of Cost.

House No. 3.

Excavating	$110 00	Plastering	205.00
Masonry	190.00	Painting	310.00
Cement floors and walks	85.00	Hardware	150.00
Lumber	1,170.00	Mantel	55.00
Sash and doors	235.00	Tile floors	100 00
Carpentry	995.00	Hardwood floors	190.00
Plumbing	305.00	Electric fixtures	155.00
Wiring	95.00	Shades	50.00
Heating	145.00	Linoleum	45.00
Tinwork	75.00		$4,665.00



The entrance is especially charming. *—E. B. Rust, Architect.*



fornia, and was built in that city for $4,480, of which a tabulated statement is given.

The third house shows a Californian's attempt at blending two distinct types of foreign architecture—the Swiss chalet and the Dutch Colonial. The outside walls are covered with split redwood shakes, which are stained a reddish brown color, and the roof is shingled. The exposed masonry is of red brick, and the roomy front porch and terrace, extending entirely across the front, is floored with cement, while the foundation is of concrete. The entrance is especially charming.

Here again the front door opens into an entrance hall, and there is a somewhat similar arrangement of staircase and connecting hall as is shown in the plan of the second house. The large living room has a fireplace, of brick construction, with a built-in bookcase at either side. Sliding glass doors separate this room from the dining room, and connected to the latter by a colonnade opening is a delightful sun-room. The dining room has the usual built-in buffet, and between this room and the kitchen is a small pass-pantry. On this floor is also a servant's room, besides the customary screened porch in the rear.

On the second floor are three bedrooms, a screened sleeping room and the bathroom. Each of the inside bedrooms has a closet, the bathroom two medicine chests and a built-in seat, and the hall a small linen closet.

The woodwork of the entrance hall, living room and dining room is of pine, finished to simulate weathered oak, and the remaining rooms are finished in white enamel. The entrance hall and the two rooms here mentioned, as well as the three bedrooms, are papered.

The house has a basement underneath the center, and the rooms are heated from a furnace. E. B. Rust, architect, of Los Angeles, California, was the designer, and the cost of the house was $4,665, as shown in the tabulated estimate.

Fruit in the Home Garden

"A HOUSE is never a home until guarded by trees, seconded by shrubs, and tied down with vines and creepers." People have come to accept the aesthetic and even the commercial value of shrubs and vines. A house is not considered completed until the planting has been done. Much time and study is devoted to the cultivation of vines and shrubs. The Department of Agriculture comments with surprise on the lack of attention given to the home fruit gardens, even by those who have suitable situations and facilities for raising fruits, and who are unable to purchase them readily because markets are not accessible. A mid-western farmer goes to southern California, buys a small fruit ranch, or even a city lot, and decides to live there for a few years. He will select the finest varieties of the fruits which his family like best to eat and plant one or two of each as the case may be, so that he will have at his door the fruits his family wish to use. These fruits count as part of the shrubbery and planting about his house.



Grape vines supply a shaded walk in summer and fruit in autumn.

In any part of the country fruits do not require much more care than shrubbery. Now that strawberry and raspberry plants have developed so that they bear fruit from early spring until the frost comes, any little plat of ground will repay its cultivation. A few plants of each variety will bear all of the fruit which a small family will use, from day to day. What other planting could be more beautiful, in the spring than an ap-

ple, peach or cherry tree, even though they are not "neat" when the blossoms are falling?

Americans are notably a fruit lov- and fruit eating people. A fair proportion of them have a little plot of ground at their disposal, and some planting. Notwithstanding these facts, fruit culture has come to be classed with the specialties, and few people who consume fruit are actual fruit growers.



What is more beautiful in the spring than a fruit tree.

The cultivation of fruit teaches discrimination in the choice of fruit. If every purchaser were a good judge of the different kinds of fruit, there would be a greater demand for fruit of a high quality. The cultivation of fruits in the home garden would do much toward teaching buyers to discriminate between the good and the inferior varieties of fruit.

As one's interest and knowledge in the growing fruits increase, their care, rather than becoming a hardship will prove a pleasure instead. The city man who spends most of his time in a stuffy office, will find in his fruit garden, healthful employment and he may develop that delightful thing, a hobby.

Horticulturalists tell us that in proportion to their size, dwarf trees are more fruitful than standards; they come into bearing sooner and are therefore of special value for use in fruit gardens. At planting time all broken or decayed roots should be cut away, leaving only smooth cut surfaces and healthy wood to come in contact with the soil. If a large part of the root area of the plant has been lost in transplanting, the top should be cut back in proportion to the roots remaining. By so doing the demand made by the top when the plant starts into growth can be met by the root.

The holes in which trees, vines or shrubs are to be set should be ample, so that the roots of the plants may have full spread without bending them out of their natural course. The earth at the bottom of the holes should be loosened a spade depth below the line of excavation. The soil placed immediaely in contact with the roots of the newly set plant should be rich top soil, free from sod or partially decayed organic matter. Firm the soil over the roots by trampling, as this brings the soil particles together and at the same time in close contact with the surface of the roots. A movement of soil water is thus set up and the food supply of the soil brought immediately to the use of the plant. When the operation of transplanting is complete, the plant should stand one or two inches deeper than it stood in the nursery.

A cozy summer veranda may be covered by grape vines, thus securing the double advantage of a cool, shady nook during summer and a supply of fruit in autumn.

The Two-Family House

The Salem Group

THE housing of its people in a livable manner is one of the gravest problems which is now facing any community. A certain proportion of the people are independent. They own, or they purchase, a plot of ground and upon that they build such a home as they choose and are at the same time able to finance. In closely built regions, where the available lots are small in size, individual homes are too close together to have a sufficient sunlight and air, unless the people of a community cooperate in the placing of their houses so that each shall interfere with the other as little as possible. If a house is placed at the lot line on one side it gives all of the available space on the other side of the house. Two houses adjoining in a party wall may be much better lighted in this way with windows on only three sides than if each were set in the center of its own lot, and only a few feet of ground between.

In this way the two-family house has been evolved. In group planning the houses are not all set at the same distance from the street, and so do not shut out the light from each other to a great extent. The planning and placing of a group of houses brings into consideration a number of problems which many home builders do not think about until the individual house is built and the neighboring house is placed beside it.



Group of two-family houses at Salem, Mass. —*Kilham & Hopkins and Philip Horton Smith, Architects.*

Realizing this fact, several communities and "foundations" have undertaken to develop some of the possibilities of group planning. The results are proving to be of great interest to the home builder as well as to the people who rent or who build for investment.

Following the great fire which swept the industrial section of Salem, Massachusetts, more than a year ago, leaving homeless a large proportion of its population, the Salem Rebuilding Trust undertook the problem of housing these people

and of rebuilding the industrial districts of Salem, utilizing the best thought and study which has been given to this subject. To Messrs. Kilham & Hopkins, architects, of Boston, was intrusted the planning of this district. The view of the group of houses here shown, gives in a general way the solution of the problem which was reached, and which as the houses are completed and occupied is proving a real solution, practical, economical, and filling the needs in a fairly satisfactory way.



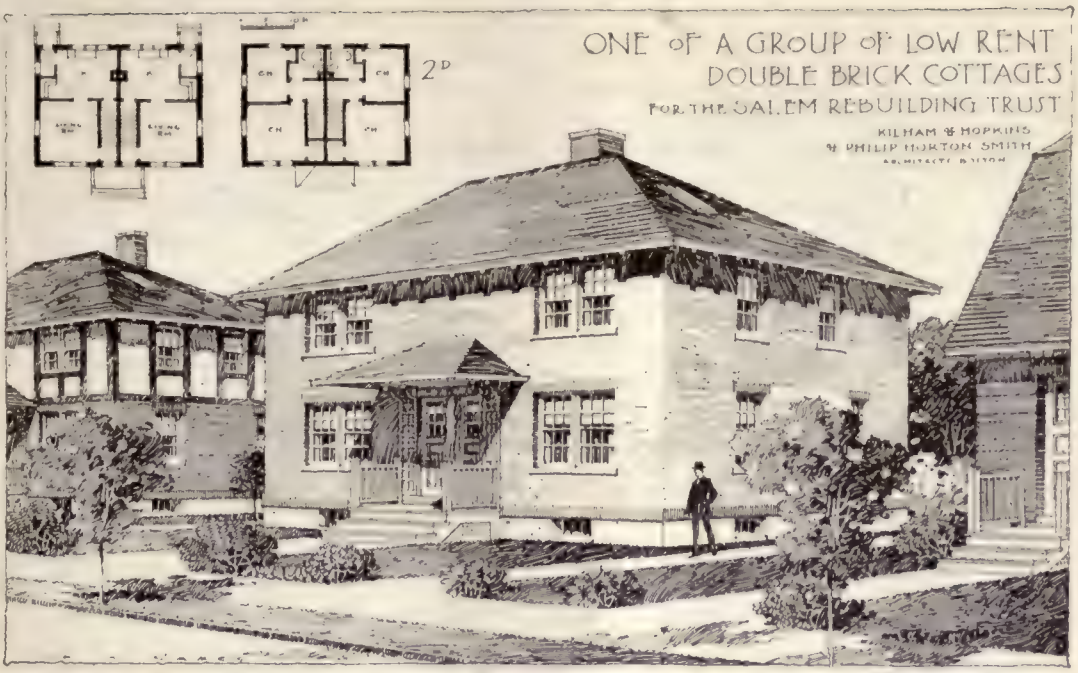
Two-family house with four rooms each. —*Kilham & Hopkins and Philip Horton Smith, Architects.*

It was not a new problem to these architects. In the suburbs of Boston they had already completed the development of a community or garden city group, where the houses were fireproof, brick and tile construction, and completed for very moderate prices, while making extremely attractive homes.

In the Salem group, two-family houses are used. Sketches and plans of different types of the two-family house are shown, one house giving four room apartments, and the other giving five rooms to each family. Each house is as completely independent as though there were two brick walls and two feet and a half of unoccupied ground between them instead of only one fire-brick wall. Windows would be no more impossible or useless in one case than the other. The larger unit makes a better looking neighborhood, and the placing on the ground gives the maximum of light and air to each.

Each family has a separate house and yard and has a home privacy almost equal to the old-fashioned village life in New England. These dwellings are built of brick, with slate roofs, and answer the most rigid requirements of the fire limit restrictions of Salem, which are now more rigid than many other cities of the metropolitan district.

These low cost, fireproof houses in Salem are now, many of them, completed and occupied. Good business judgment of the trustees and the skill of competent architects combined have produced these



Two-family house having five rooms each. —*Kilham & Hopkins and Philip Horton Smith, Architects.*

model dwellings, which are literally models, because they can be duplicated by others profitably and will be better permanent investments than the old style frame tenements. Others are already copying these houses.

The cost of each double dwelling is $3,775, and the land is $280, making $4,055 for each two-family dwelling. This is $2,027.50 per family and is not more than the usual cost of housing for the small family.

It is the intention of the commission to rent each tenement at a price not exceeding fifteen dollars per month. These rentals are no higher than those paid by the industrial workers before the fire, for frame tenements.

Our cities are being filled with more or less expensive apartment houses where small families are crowded together side by side and tier on tier. The apartments are luxuriously appointed. The tenants have every convenience. It is an easy way to live. But the apartments are built on the same basic principles as the tenements in the slums; to give as many rent-paying units as possible within the building limits of the property. Many of the hastily built, new apartments will degenerate in a few years into tenements, depreciating the value of the neighboring property. Realizing this, those who are studying the housing problems are developing other ways in which people may live with no larger rentals than they now pay for an apartment in a flat or multiple-family house, and yet have the independence of the individual house. One solution is found in the two- and three-family houses, especially as they form part of a group plan. Each has its own bit of grass and garden. Only one family lives within the four walls, which may very easily be fireproof. No other family is overhead. Through the co-operation of the community the heating and attendance may be arranged as easily as in an apartment. The planning and building of a group of houses results in a very great economy in the cost as compared with the building of the individual house.

We are beginning to understand and realize the truth that housing is the most important single business enterprise, and that it represents the largest investment of our wealth. It affects us all and demands our best collective judgment and business enterprise. Once we indifferently thought it was none of our concern. Now we recognize that whether we will or not, we are practically members of a great co-operative housing company which takes our rent moneys and keeps us supplied with a place to live. When we once realize that we pay the bills for all this unsightly and wasteful building in our communities, we will demand that our money be used to provide buildings of a permanent character, and which really give us the living conditions which we desire.

A Gambrel-Roofed House

THE term "old-fashioned" has lost its odium and when applied to a house has acquired a sense of the quaintness of the New England house, which has been good enough to out-live its generation. We find that quality in this gambrel-roofed house, of which we have only a pen and ink sketch, but which makes a charming picture.

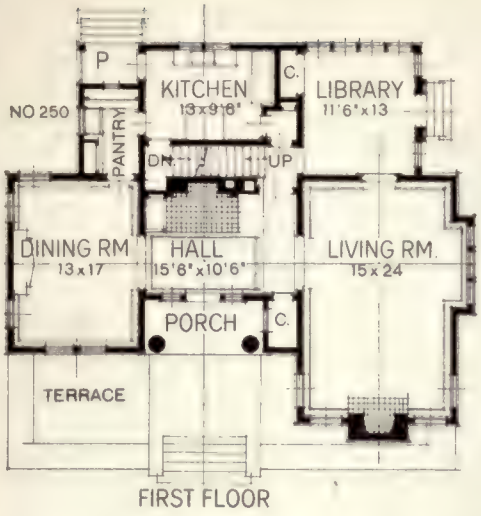
We associate the gambrel roof especially with the work of the early Dutch colonial builders, but it has been largely used because it gives almost a full second story under the roof, with interesting possibilities in the projection of the eaves.

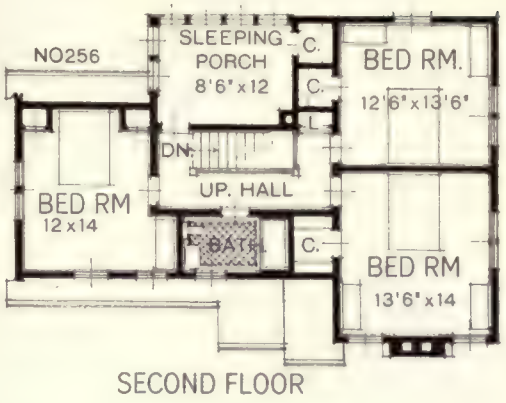
The entrance is from the porch, recessed under the main roof, into a reception hall with an attractive brick fireplace and built-in seats. There is a coat closet with outside light reached from this hall.

The living room is most attractive with its projecting bay and brick fireplace. The outside chimney extending up through the front gable relieves the front eleva-



A pleasing old-fashioned house. *—John Henry Newson, Archt.*





tion of what might otherwise have seemed commonplace, and adds a piquancy to the exterior.

Back of the living room is a fair sized room which is largely glass and on the plan this is called the library. It is really a sun room and with its outside entrance and good closet it would make a very convenient office or den for the man of the house. It is near enough to the kitchen that if desired it may be used as a breakfast room, though the doors between will prevent odors from reaching the front part of the house. On the other side the kitchen connects through the pantry with the dining room, which has good window grouping and a built-in buffet.

The fireplace and seat make the hall very inviting. The stairs, back of the fireplace, are easily accessible yet secluded from the hall and connect so closely with the kitchen that service stairs are unnecessary. The kitchen has an outside entry. It is well lighted and conveniently arranged.

On the second floor are three good chambers, each with good closet room; a linen cupboard opening from the hall; a tiled bath room; and a good sleeping porch, which is fitted with a closet.

There is a full basement under the house with hot water heat, laundry, fuel and vegetable rooms. The foundation walls are of concrete. The exterior of the walls is of shingles or wide siding and is stained as is also the shingled roof. The architect gives the estimated cost as $6,000, with hardwood floors, hardwood finish for the first floor and pine for painting on the second floor.

A Cottage on Colonial Lines

THIS country has never known a more reasonable mode of building nor one more beautiful than that practiced during the Colonial days. It was an adaptation of the English Georgian version of classic styles, to American Colonial homes. The details which were originally intended to be used in stone were adapted to the Colonial building material, a soft wood which they almost invariably painted white. In the finer examples, Colonial details were very beautiful, and these details now stand to us for the Colonial style, which we have

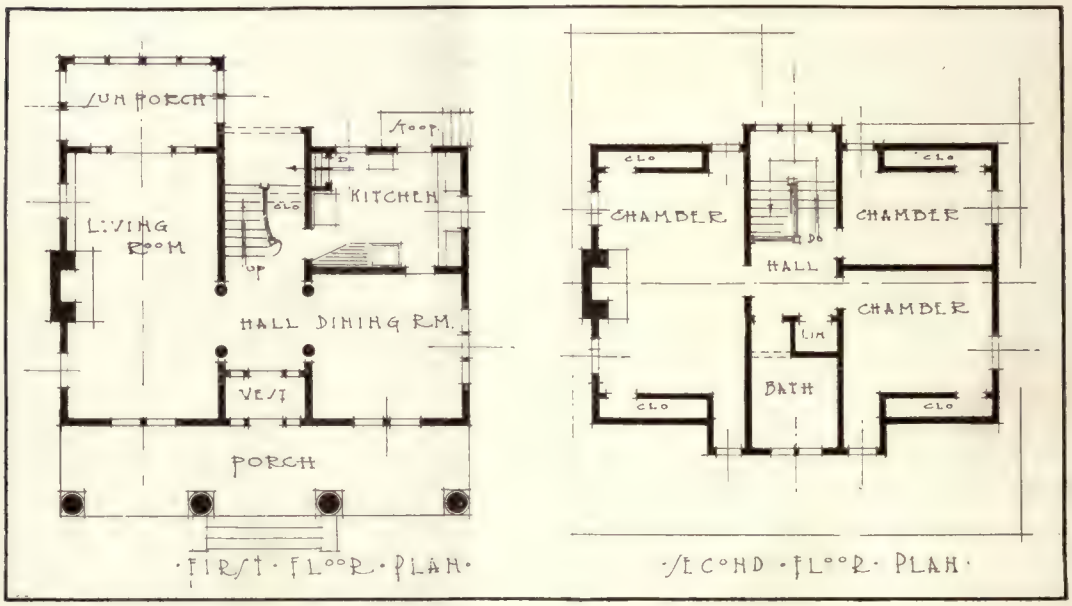


With a porch the full width of the house. *W. W. Purdy, Architect.*

again adapted to our modern uses. A house which has well-proportioned columns with Doric capitals, especially if they are made of wood and painted white, we call a Colonial house.

The Colonial fathers never knew the luxury of a modern porch. They sometimes had a "stoop" or portico as a part of the Colonial entrance. Yet this house, with a wide porch its full width we call Colonial because of its details; the columns and entrance, the white mouldings, the green blinds on the light wall, all bespeak the Colonial type of building.

A Colonial interior, when carefully carried out, is not less interesting than the



exterior. The wide central hall, generally with an outlook beyond, was a usual feature of the Colonial house.

In this case the windows on the stair landing give the outlook, while the space under the stair landing is utilized for the basement stairway from the kitchen, and may have a grade entrance if desired.

The whole interior of the house, with the exception of the kitchen, is done in white enamel, with doors of birch, stained mahogany. The hall gives the key to the interior and is one of the most interesting features, with its Colonial stairway, mahogany rail and treads, with the white spindles and white risers, which tie into the white finish of the hall.

The fireplace in the living room has a Colonial treatment, with bookcases beside it. French windows lead to the sun porch, adding to the attractiveness of the living room. The kitchen is in pine, finished in the natural color.

The second floor has a large chamber with a fireplace, and two smaller ones, with the bathroom conveniently central.

There is a full basement under the house with a well-lighted laundry, furnace and fuel rooms, vegetable and fruit closets.

A Seaside Cottage



The planting is simple yet effective. —*George Palmer Tilling, Architect.*

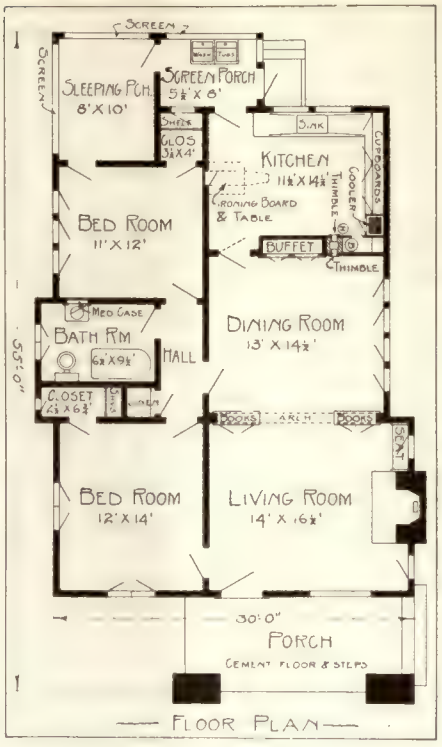
"VISTA DEL MAR" as this delightful little bungalow within view of the sea has been called, has a low pitched roof covered with composition roofing. This type of roof has become very popular on the Pacific Coast and is being used throughout the whole country.

The exterior walls are covered with half-length shakes. The front porch floor

and steps are of cement and the short porch columns are of cobble stones with cement caps.

One of the interior features which should not be overlooked is the screened sleeping porch which can also be used for a servant's room if desired.

The disappearing kitchen table and ironing board which is shown in the kitchen is a wonderful piece of furniture. The table can be used separately from the ironing board and both board and table can be folded up into the cabinet when not in use. The entire kitchen has been very carefully planned. The sink is well lighted with good tables.



Notice that the drain boards are shown without the unsanitary grooves. Set tubs on the screened porch make a convenient place for laundry work. A hinged cover closes over the tubs when not in use converting them into a porch table.

The dining room has a built-in buffet, and a good group of casement windows. Five foot book cases screen the dining room from the living room, which latter has a good fireplace with a projecting outside chimney. The treatment of the planting as shown is very simple, yet effective. A massing of color with the grass for background.

A Snug Little House

THIS "Snug Little Cottage" is worthy of more than a passing notice. It is small and may be built at a low cost. The main part is 25 feet in width and 25 feet in depth, with a rear extension of 8 feet and a piazza at the left side 9 feet wide. It has one main living room across the front, which is 20 feet wide in the clear, and 12 feet 6 inches deep. The side piazza is intended to be enclosed with glazed sash and opens in connection with both the living room and dining room with wide glazed French windows. The finish of the first floor is Washington fir stained brown, and the floor is of natural oak. This same finish is carried through the piazza and the walls and ceiling of piazza are plastered and given the same finish as the living room. There is one main chimney centrally located with a wide fireplace in living room, and flue for kitchen and furnace. The kitchen and dining room are conveniently arranged and have ample cupboard space. In the rear is a maid's room and a screened porch opens from the kitchen. The main stairs lead up at the right side of house directly in front of the vestibule entrance. The second floor has one large front chamber and two smaller chambers in the rear and a small glazed sleeping porch, which is

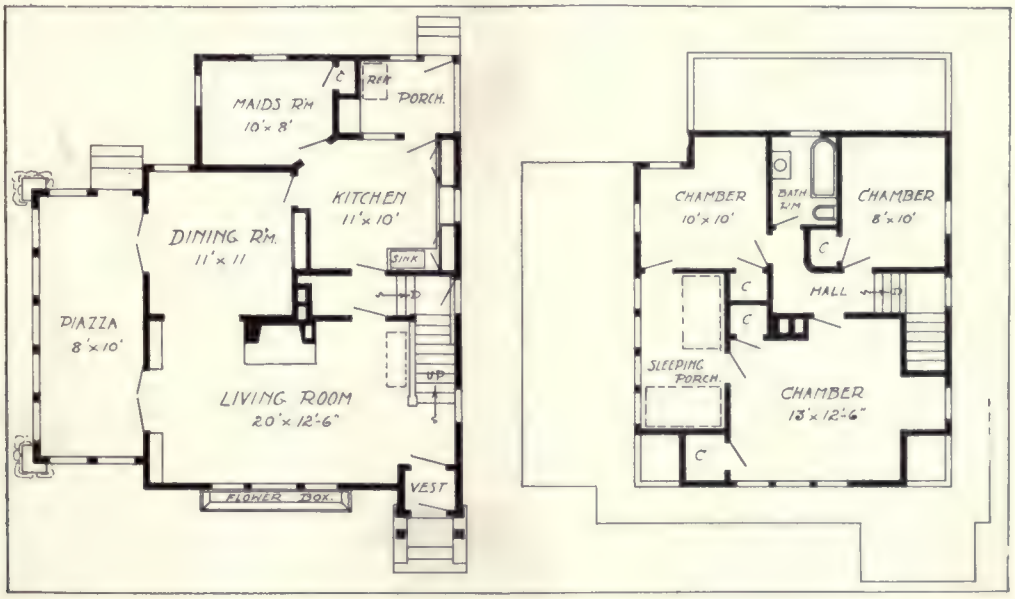


The sun porch opens from both living and dining rooms. —*Chas. S. Sedgwick, Archt.*

connected with two chambers. The bathroom is in the rear over the kitchen. There are ample closets provided.

The basement is the full size of the house and has grade entrance from the basement stairs, which are under the main stairs.

The exterior is covered with cement stucco with pebble dash finish, and the roof is shingled and stained. The architect estimates that it should cost from $2,200 to $2,500 to build this cottage, exclusive of heating, plumbing and electric wiring.



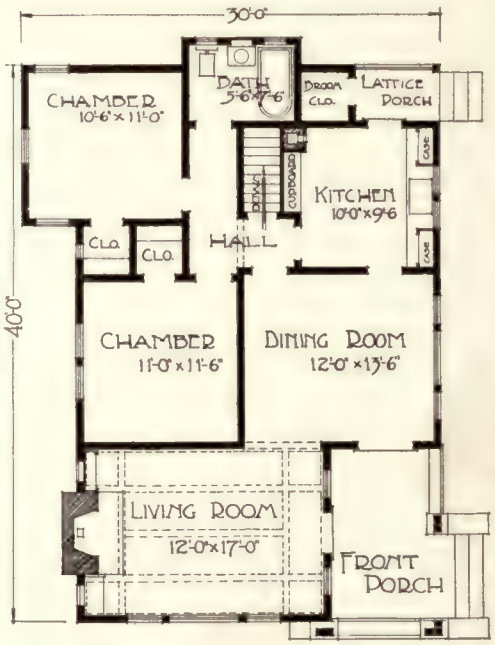


The entrance at the side gives an unbroken lawn. —*Jud Yoho, Archt.*

A Bungalow with Side Entrance

FIVE rooms, well arranged on one floor fill the requirements of the so-called, average family. The accompanying design adds to this a front and rear porch, and full basement. The corner porch gives entrance to either the living or dining room, and may be used from both. The fireplace makes the central feature of the end of the living room, with a case for books on one side and a box seat on the other side. Under the hinged cover of the seat may be kept the fire irons and kindlings. A beamed ceiling is indicated in the living room.

Both of the bedrooms have good closets and are convenient to the bath room while they may be secluded from the rest of the house. The bath room fixtures are very compactly arranged. A small latticed porch gives the rear entrance to the kitchen and has a good sized closet for refrigerator or storage. The kitchen arrangements are convenient and well lighted, everything right at hand and so placed that the best possible light falls directly on the work in hand. There is a good cupboard beside the range. The sink is under the windows and convenient to cupboards on either side. Be



FLOOR PLAN No 559

sure that the sink is set high enough.

The entrance steps to the porch are from the side leaving an unbroken lawn in front of the house. The porch walls and buttresses are here shown built of clinker brick which gives an unusual texture to the surface. The exterior of the bungalow is sided with wide and narrow boards alternating, and the siding is carried down to the water table just above grade. The wide projecting eaves are carried on brackets.

The Typical Bungalow

FROM this broad porch, with its clear sweep from corner to corner, unobstructed by columns, is given an unimpeded view, and free entrance of light and air. The massive exposed chimney, solid porch work, and the overhanging eaves and gables all bespeak welcome and hospitality in unmistakable terms. The outside walls and roof are shingled, the porch floor and steps are of concrete. Inside the walls are of hard plaster tinted or papered as desired. The rooms are large and conveniently arranged with plenty of closets, cupboards, linen-press, etc.



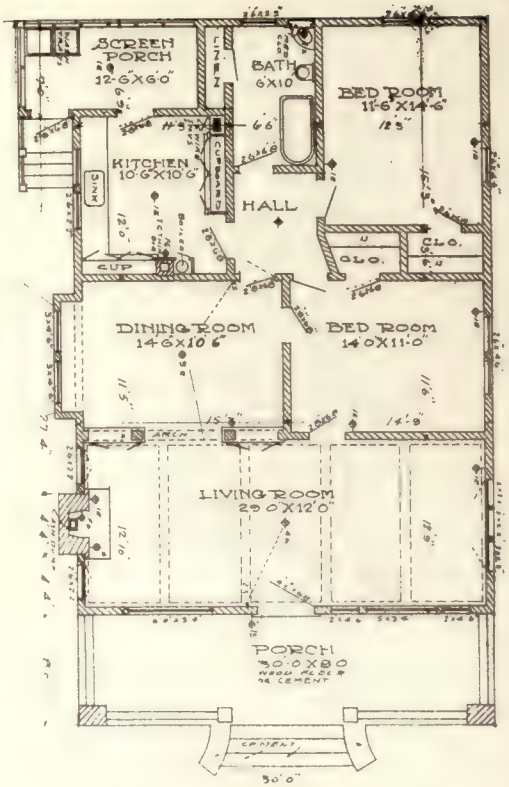
The wide span of the porch gives an unimpeded view. —*Bungalowcroft Co., Archts.*

Dining room is wainscoted with plate rail and connects with living room by a handsome colonaded opening with built-in book cases. The kitchen is fitted with all of the conveniences. Walls and woodwork are enameled a glossy white, perfectly washable making it, as a kitchen should be, one of the most attractive parts of the house.

The architect calls this a typical bungalow saying that it has without doubt, either as here shown, or with slight modification, been built more frequently than any other single type of bungalow, not only on the Pacific Coast but throughout the United States, and gives as the reason for its great popularity, the satisfaction it always gives as a quaint, cozy, comfortable home. The designers have

carefully studied the needs of the family and the ease of the homemaker.

This house is about 30 feet in width on a 50-foot lot. It has, the architect tells us, been built many times in California for $2,000 and in the East with cellar and furnace for from $2,500 to $3,000 according to finish, etc. If desired the large attic may be utilized for storage or for two good bedrooms with closets. Stairway is arranged for by slightly reducing the sizes of dining room and bedroom, and windows are built in the gable ends if the attic space is to be utilized. A caution should be given here of the risk which the homebuilder takes when he attempts to build this or in fact **any** bungalow from pictures and without the carefully worked-out plans of the original designer. A line too long,—a wrong proportion,—an angle out of sympathy and your house joins the long list of architectural horrors which may be seen in every town and village. It costs no more to build a home that people will stop and admire,—one that they will show to their friends as "just about the cutest little home in this town" than the kind that your carpenter puts up "out of his own head" or attempts to copy from a picture. Carefully worked out plans and complete specifications will save the home builder more than their cost in money and vastly more in the worry and anxiety which they save.



Homes of Individuality

Selected by W. J. Keith, Architect

THE charm of the unpretentious exterior is growing upon American home lovers. The house which retires from, instead of courting the public gaze is beginning to find favor. The simple stucco surface and gambrel roofs give a pleasing exterior to this house planned for a family of growing children. The rear stairs, which are so often omitted from the compact small house, are here given additional use by including a grade entrance on the cellar stairs, which gives entrance from the arbor and playgrounds, connecting with a main floor lavatory and the second floor bedrooms. A mother with growing children will appreciate their being able to come in from play and wash or dress before entering the main hall or living rooms.

The fireplace in the main hall gives a



The house which retires from the public gaze is finding favor.

greeting, with the library on one side of the stairs and living and dining rooms on the other side.

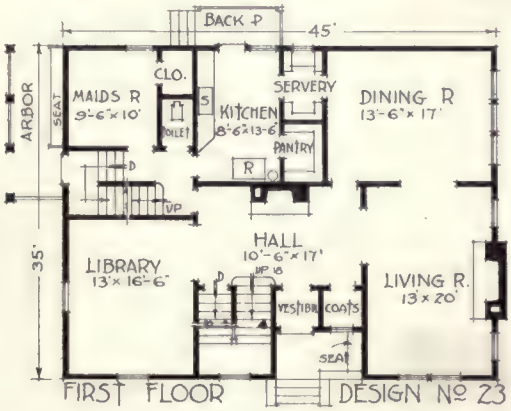
Ample sleeping accommodations are arranged on the second floor. With maids' room off the rear stair hall, on the first floor, there is no possibility of the maids disturbing the household late at night, for their quarters are quite shut off from the rest of the house by a back hall arrangement.

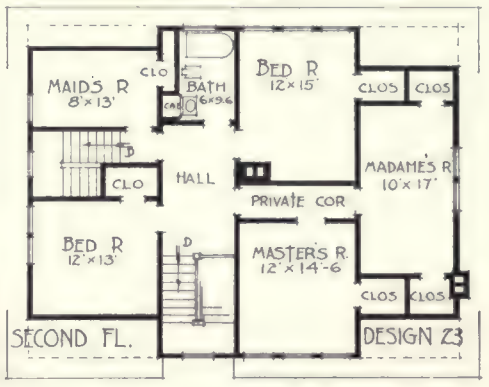
While the house is of good size the lines are simple and the construction economical, with a pleasing exterior.

A Small Home

In places where field stones may be obtained without great difficulty nothing makes a more satisfactory and attractive building material. This small house shows field stones used in the walls to the heads of the windows and for the porch, with shingles above. The stone porch extends the full width of the house and is hospitable and inviting.

The interior arrangement is compact and good. The living room is especially desirable with its attractively grouped windows, and open fireplace in the rear wall. A box seat is built in between the stairs and the fireplace. The dining room is attractive with its glass door opening on to the rear porch, which could be easily extended if desired and be given a pergola treatment. A pantry, with generous cup-





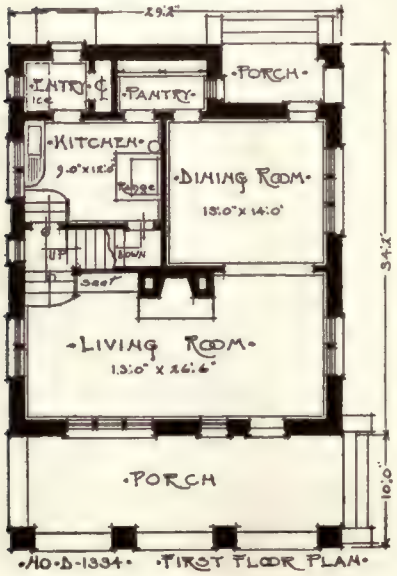


The stone porch gives an attractive entrance.

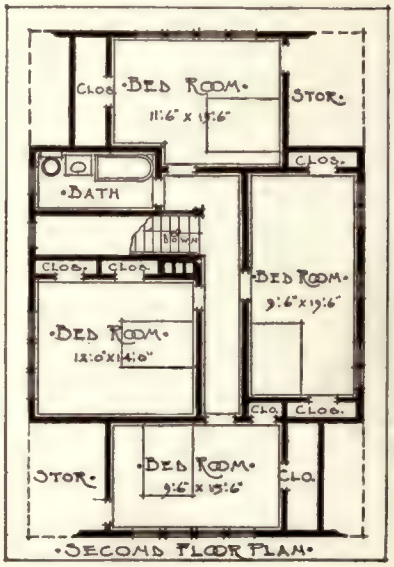
closet and refrigerator space is provided in the rear entry, and four steps to a platform on the main stairs gives convenient access to the front door and second floor.

The rooms on the second floor are all of good size and furnished with roomy closets. The room on the right could be readily made into two smaller rooms if desired.

The basement contains a laundry, extra toilet room and cold storage closet. It extends under the entire house and has a cement floor.



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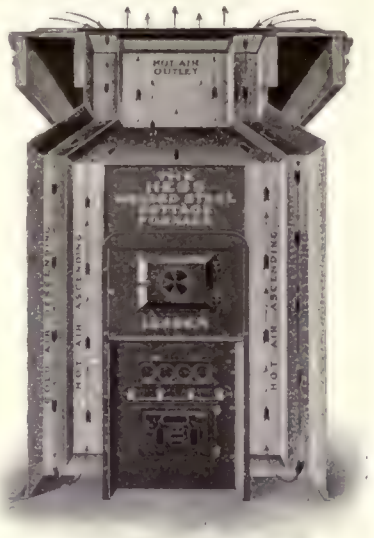
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The Management of Pattern.

ONE of the most usual ways of spoiling the effect of a room is to introduce too much pattern. It is not unusual to see a wall paper of distinct pattern, often of several colors, figured curtains, upholstery of quite another design, and a confusion of cushions and table covers, all more or less elaborately embroidered, all in the same room. Each may be exquisite in its way, but the effect of the mixture is horrible beyond the power of words to express.

If there is one thing more than another which I have for years been endeavoring to impress upon my readers it is that there is room in any room for just one decided pattern. If the furniture is figured, the walls and carpet must be at least approximately plain. If this rule, which is by no means of my own making, be followed, you may not achieve distinction in your furnishing, but you will avoid serious offense.

But like all rules, this one has its exceptions. If you study a fine Persian rug, or, for a more modern example, one of the wall papers or chintzes designed by William Morris, you will see examples of the combination of two distinct patterns. In the Persian carpet you will see the general outlines of the design worked out in two or three colors on a light colored ground, and the main spaces of the ground diversified by a small pattern, while very often the centers of the decorative forms are also filled with a small pattern. The simplest examples of this is in rugs which have a design of conventional palm leaves on a figured ground, a treatment which you will also find in cashmere and camelshair shawls. In Morris' tapestries and chintzes the design is usually one of conventionalized floral forms in strong color on a light colored ground which in its turn is covered with a tiny sprig or diaper pattern. It requires but little study of either of these examples to discover how much the fabric gains both in richness and finish by the combination of pattern with pattern. But it is also essential to note that the leading pattern is always stronger and larger than the auxiliary one, also that the latter is extremely conventional, even to the point of insignificance. Moreover, the distribution of the secondary pattern is almost always uniform and it is never sufficiently pronounced to detract from the value of the pattern proper.

How apply this principle to the ordinary room and to the distribution of pattern between its various elements? Take one of the popular white bedrooms, which depends for relief upon a brightly flowered linen, chintz, or cretonne. Naturally woodwork and walls will be white, the ground of the printed fabric will be pure white, and the furniture will be white enamel. It sounds well enough on paper, but in practice the effect is apt to be a little glaring, and the surfaces lack depth of tone. To begin with, the pattern of the cretonne should be a bold one, one which asserts itself, not one of the rather fiddling design of small sprays of flowers at once so common and so ineffective. Against so much white you should use a cotton rather pictorial in effect. We must admit that any textile which is pictorial in effect sins against the canons of decorative art, but sins so agreeably that much is to be forgiven it. Personally, I think nothing looks so well in a room of this sort as a good combination of pink roses and blue ribbons. Then, instead of

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a plain surfaced white wall, which may be either paint or distemper, have a figured white paper, one with a very small, allover pattern in two tones of white. You will find such papers among those sold for ceilings, but they are equally good for walls, far better, I think, than two-toned white-striped papers. With one of these papers, your wall is still white, but it has acquired a certain texture and depth of tone, while the pattern is so unobtrusive that it takes nothing from the effect of the figured textile which gives the room its essential character. It is always a risky business trying to match textile design in wall paper, but it is not an impossible thing to find a blue ribbon border which will harmonize with the blue ribbons of the cretonne used, and which can be carried around each of the walls, panel fashion. There are also borders made to match individual cretonnes and these look well above the figured white wall, although the designs are seldom very satisfactory.

Another very good wall for the sort of room I am treating is one of the French arrangements of bordered panels in delicate gray tones. These copy with fidelity the panelled and carved wall of the Louis Seize period, and are very delightful, when the size of a room and the disposition of its openings allows them to be used. They are expensive and their suggestion is of a rather imposing sort, which makes them unsuitable for the house of modest pretensions, but they are a charming wall finish for a formal drawing room, in which the place of the cretonne or printed linen can be taken by a flowered tapestry in delicate colors.

The Problems of the Living Room.

It is in the living room that the matter of pattern presents the most difficulty. Here, I am inclined to think, the best solution is the wall of more or less indefinite pattern in neutral color, the sort of paper which suggests a woolen damask or a dull surfaced brocade, the wall which may be a warm gray, olive, golden brown, or even blue gray. Then the furniture coverings can be plain, leather, velour, liberty velvet, or corduroy, and the element of decorative pattern supplied by the curtains, hanging to the floor in straight folds, and made of some strongly patterned cotton or linen, either contrasting boldly with the color scheme of the room, or carrying out its general tone. An illustration of what I mean is found in a room whose walls are covered with a two-toned stripe in a low key of green, the woodwork white, with a line of green to tie it to the walls, the chairs and couches covered with green velour, darker than the walls, while the curtains are of cretonne with a black ground and a decorative pattern of rose colored flowers, green leaves and blue and green birds. The green carried out the tone of the walls and covers, the rose contrasts agreeably with it and the blue of the birds permits the introduction of touches of blue in the way of ornaments and cushions.

Or suppose a golden brown wall, one of the best possible backgrounds for pictures. The furniture may be of the sort that does not need upholstery, in brown oak, while the curtains will be of printed linen on a tan colored ground, introducing brownish foliage and blossoms of soft rose and purplish pinks, tones which can be repeated in various objects in the room, in cushions, in the covering of a single chair, in a vase, while the rug might be an Oriental one, with no very distinct pattern but with the suggestion of a purplish pink bloom, a thing which sounds fanciful, but is by no means unusual in eastern rugs. Or, with equally good effect, the curtains might be made from a petit-point tapestry, one of those charming fabrics which copy the tones and to some extent the designs of old French and Flemish tapestries. The wall pattern in this case should be a small and unobtrusive diaper, possibly a buckram or burlap paper with its slight suggestion of fabric, the furniture covered with blue or russet corduroy, in one or other tone of the tapestry, the whole scheme brightened by introducing a rich orange brown.

Any number of variants on this idea might be suggested, but I leave something to the imagination of my readers. The important points to be remembered are the subordination of one pattern to the other, the minor pattern being introduced simply as an enrichment of the other, and that any material of strong decorative effect must be used sparingly.

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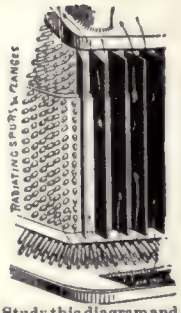
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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Mahogany and Oak.

C. E. P.: I am a constant reader of your magazine and as we are building a new home we would like help in furnishing the living room, den and reception hall. The woodwork in these rooms will be quarter sawed oak, also the floor. My living room and reception hall furniture is mahogany but will get new rugs. The den furniture is light oak and the rug is mostly dark green for this room. Had thought of gray walls for living room and reception hall with green and gold stenciling, but didn't want the den to be like them. Dining room will be oak-stained early English with blue walls, rug, hangings, etc. Would also like ideas for woodwork, walls and floor of kitchen—other than white enamel.

Ans.—We have often puzzled over the conundrum of why so many people who have mahogany furniture use an oak trim in the new house and vice versa. It is impossible to bring oak woodwork into harmony with mahogany, unless a very dark English brown stain is used.

In regard to color scheme for walls, gray is not good in a northwest room and green still worse. The green rug might possibly be used in the den if you will carry out a consistent scheme of green and yellow, in treating the room. We should make the walls soft dull yellow, cream ceiling, and, if possible, get some upholstery onto the light furniture, in dull yellow material. Then have curtains of green and much yellow cretonne.

Do not carry green into the living room at all, but do it in soft creamy browns and rose. You do not say whether you expect to use merely tinted walls or a combination. It will be very difficult to get it right without paper in the hall at least, for there you need to bring the room colors together.

A quite attractive kitchen can be made by finishing the woodwork natural with varnish and painting the wall deep cream. The lower part of the wall could be painted leaf brown, with a molding between.

Textile Panels in Dining Room.

S. A. McC.—I am enclosing a rough sketch of our new home and am begging some suggestions for the interior decorations. All the woodwork down stairs will be stained oak, not too dark, and I had thought to tint the walls in all three rooms in shades of tan. A warm tan in the reception room, with a fleck of red or maroon in the rug and the same color in the short silk curtains at the high windows over the bookcase and settle. Then in the living room and dining room the gray tan walls with touch of green in the living room and old blue in the dining room. The dining room walls will have wood stiles up to the top of the windows. Would you leave those panels plastered or cover with the burlap of a darker shade of tan; what would you suggest for draperies?

Ans.—We are very much in sympathy with your ideas as outlined for treatment of your interior. By having the decorator add a little *black* to the tint, you would get your grayish tan for living room, with which green would combine admirably in the furnishings and old blue in dining room. We highly approve of a textile of some sort in dining room paneling, but you will find the color you want in a ready stained burlap. There is a putty grey heavy crepe paper, we have used a great deal, that has the effect of very rough plaster and is admirable for dados and wainscot. A line of stencil decoration in soft old blue around these panels would add greatly to the room. We would use old blue Sunfast at the windows and deep, soft blue rug. Your ideas for the window shades are excellent.

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ANSWERS TO QUESTIONS—Continued

The North Dining-room.

H. O. W.: I wish to ask your advice about dining room walls which are ceiled to a height of four feet.

The room is 13x18, having windows across entire north side of room. The woodwork is finished in natural pine and floor a good maple a little darkened by use. Our furniture is Flemish oak.

As the woodwork is somewhat marred we think of painting instead of keeping it in brown. All of the rest of woodwork in entire house is white or ivory. I would like to introduce a shade of blue into the room.

I've tried to find an answer to my question by looking over back numbers of your magazine, but did not find a case just like ours. Will you also kindly advise me how to furnish a room for my 4-year-old daughter. Her room is fourteen feet one way and nearly square. It has a west window and a north window. I am undecided whether to use white or gray furniture.

Ans.—If your dining room had a south exposure or even west, you might have old blue walls. But having only a north lighting, blue is not at all the color for it. We should paint the woodwork deep ivory, which will set off your Flemish furniture much better than the natural pine. The wood wainscot is too high for a chair rail and not high enough for plate rail, but probably that cannot be changed. There is a decorative paper which has blue and green foliage on a sort of yellow sunset ground. You might use that above the wainscot with a dull yellow ceiling. This would give you the note of blue you desire and also an effect of sunshine in the north room. In fact, the room would be transformed. You should then have a rug with blues and greens on a tan ground, and sill curtains of dull yellow Sunfast at the north windows.

The little daughter's room should have white woodwork and a paper with Dresden China little pink and blue roses, all-over pattern, on the walls. The furniture should be white enamel. Exceedingly pretty, simple designs now come in children's furniture. There should be curtains of white ruffled muslin and side ones of plain pink.

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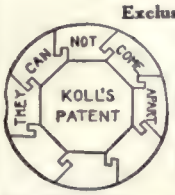
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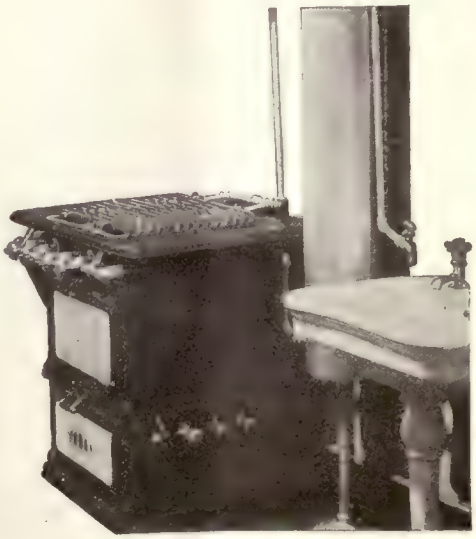
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A Hot Water Grate

PERHAPS nothing has added to the convenience of the housekeeper in a greater degree than the use of gas for cooking. The work of the cook and housewife was revolutionized when she became able to cook without replenishing or needing to watch the condition of the fire. But the one fact which the old-fashioned housewife bemoans in the use of gas, is that she has no place for her tea kettle. She has no hot water without lighting a burner for it especially, and then she cannot keep it hot. One is always wanting a little hot water without waiting for it. The hot water problem usually solves itself in winter, but in summer the question presents more difficulties.

The hot water grate seems to be a solution for this problem. It may be used over any gas stove or range, or even with a gas plate. It could be installed over a gasoline or some kinds of oil stoves. The ordinary grate over the stove or range is removed, and in its place is put the hollow grate, as shown in the cut. This grate receives the cooking utensils in the same way as the ordinary grate, but it is hollow and is connected with the water system and with the hot water tank. The water circulates through this hollow grate and when the gas burners are lighted for cooking or for any purpose the water is heating at the same time.



The hot water grate in place.

With this grate there is practically no waiting nor no trouble. You simply light the gas and before you have skimmed through the paper the water is hot enough for a Turkish bath or a shave.

You use the gas to prepare a meal and you have a

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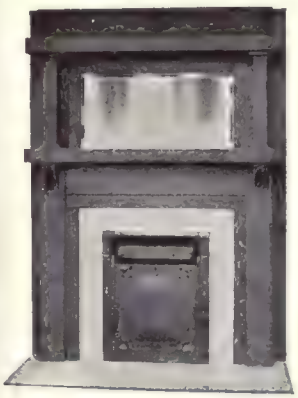
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tank full of hot water, your laundress boils a boiler of clothes and you have ample hot water for the remainder of the washing. Each time you light a burner in the gas stove, you heat water to use.

During one of the tests with the hollow grate the water was drained from the hot water tank which it supplies and the



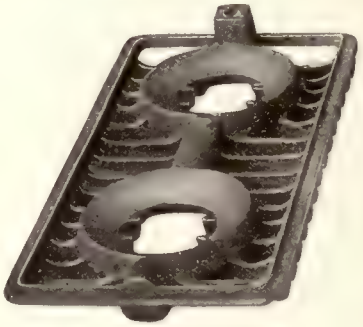
Top view of hollow grate.

tank was filled with cold water. The four burners of the gas stove were lighted and in five minutes the water in the tank registered at 202 degrees.

It is claimed that this hollow grate plays a joke on the gas company and heats the water without any additional expense to the house holder, over what the gas would cost for the cooking. One would expect that in heating the water in the pipes it would retard the cooking over the grate, but a clever device in the shaping of the under side of the grate seems to have overcome that difficulty. If you notice the cut showing the under side of the grate you will see the circle of the hollow grate which holds the water in heating. The rim has a bevel so placed as to throw the strength of the flame toward the center, while at the same time it protects the outer edge of the kettle and the handle from unnecessary heat. The demonstrator asks you to remove the kettle of boiling water which you have been watching, without giving you a holder to lift it with. When you refuse to attempt it, he takes hold of the long handle unconcernedly, then lays his fingers on the outer corners of the grate. This outside heat is what has gone into the water, it would seem. The volume of water in the grate over the fire at any one time is quite small, so is quickly heated and starts a circulation. When the grates and the water are thoroughly heated, they will hold the heat for some time after the gas has been turned out.

Every one appreciates the value of plenty of hot water. It is one of the adjuncts of civilization. Any new device which helps to make it plentiful and easy to obtain is likely to be very well received. In apartment houses and large establishments there is always hot water in any quantity. Indeed that is one of the advantages of the large apartment buildings. It is in the private homes where this hollow grate will become a boon.

The owners of the smaller four and six-family apartment houses, and of the newer "duplex" types of house are installing the hollow grates on their gas ranges, as a way of competing with the larger apart-

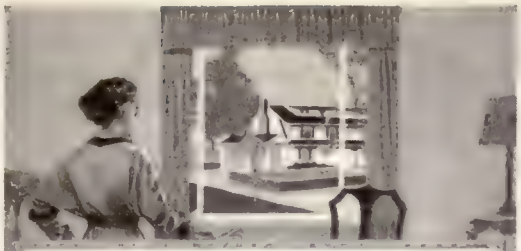


Under side of grate.

ments in the matter of a plentiful supply of hot water.

It might be noted that the hollow grate requires a hot water tank in the kitchen, or above the heating apparatus. If the large tank is in the basement, connected with the furnace or a separate hot water heater, a small twenty gallon tank can be placed over the range, and enclosed in a cupboard if one wishes to have it out of sight, as most housekeepers do.

In designing it the bars of the grate are made wide enough apart that there should be no difficulty in cleaning either the grates or the range. The grates are made to cover either two or four burners, according to the size of the range.



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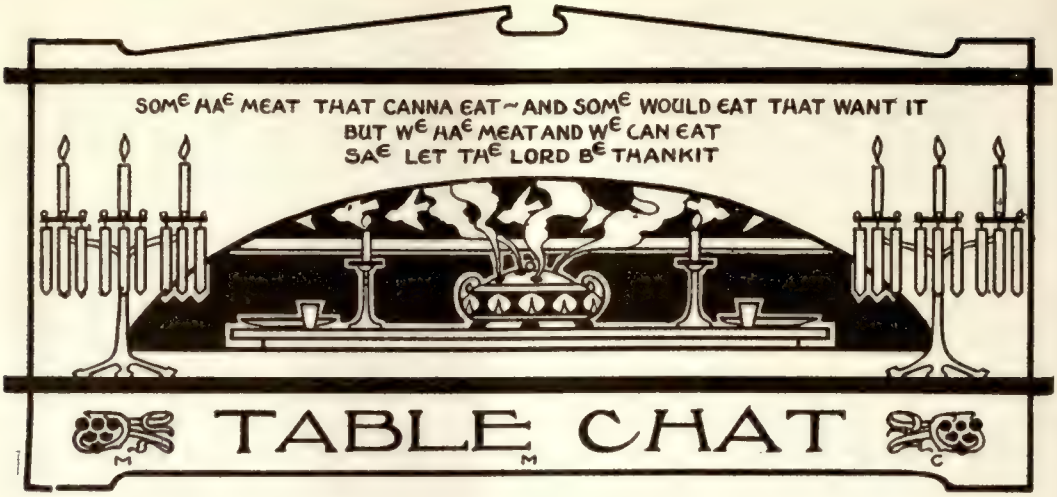
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Common Sense Applied to Table Service

THE table service in most houses leaves much to be desired, and it is least satisfactory, as a rule, in houses of certain pretention. People seem to forget that all the different things which make up a single course should be served at the same time. It is not agreeable to watch your helping of roast lamb slowly congealing while you wait for the potatoes to be followed at a long interval by creamed turnips and stewed tomatoes, and later still by the gravy. Such slow service lengthens the meal unduly, tries the patience of everyone.

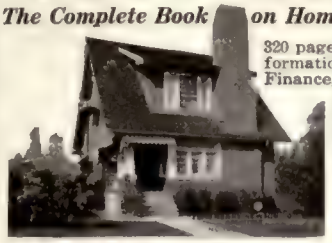


The birthday cake.

You cannot, with a single maid, expect to have the stately and elaborate service rendered in houses where they have a butler and a second man. Accept the fact and have the vegetables helped by some member of the family, the dishes containing them being left on the table during that course. Except in the case of very fluid vege-

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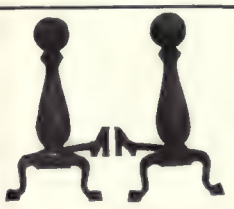
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tables have them served on the same plate as the meat. It is seldom practicable to cook tomatoes so that they do not need a separate plate, but all the creamed vegetables are much better if merely well covered with the sauce instead of floating in it.

Unless the head of a family is a very expert carver, it is desirable to have large cuts boned. A rib roast is not improved by the process but it makes not the slightest difference with lamb, veal or pork. Poultry is always troublesome, but it is very easy to cut under the joints in the kitchen without affecting the looks of the bird.

At breakfast and luncheon it is perfectly correct to dispense altogether with the services of a maid, except when a fresh supply of warm bread or the like must be brought from the kitchen. The electric toaster, the chafing dish and the coffee percolator have done a great deal to simplify the service of these meals.

The Birthday Cake and Candles.

Birthdays have a fashion of coming in the cooler months, which seem best adapted to festivities, and the cake is a very important feature of the supper table. It ought not to be a rich cake, though it often is. For little children, an angel cake, not of the cotton wool variety, but soft and spongy, is very good. Give it a thick pink icing, sprinkled with candied rose leaves and let the candles be white.

For older children, make a simple cup cake rule, omitting half a cupful of the flour and stirring in enough cocoa to make it quite dark. Put in plenty of raisins and currants and a few nut meats, and you will find it quite as acceptable as a regular fruit cake.

For decorating the table, the glass candlesticks sold at the 10-cent stores are very effective with either white or colored candles. Candle shades are just as well omitted from a children's party. They always wobble and are likely to cause grief. Our illustration shows a pretty arrangement of them with a decoration of leaves.

Some Fancy Cakes.

Always supply small cakes in addition to the large birthday cake. They make the table look pretty and give a great deal of pleasure. Given a cup cake rule, baked in a large sheet, you can have a considerable variety with little trouble. Bake the cake in a large dripping pan so that it will be about half an inch thick. Cut part of it into circles. Put two together with a layer of icing and chopped nuts, then cut them in two and ice each all over, using pink, yellow and chocolate icing. Cut some in squares, ice with white icing and press into the center a walnut meat or a candied cherry. The cats' faces shown in our second illustration can be cut out with scissors. After the chocolate icing is dry the features can be put in with white with an icing syringe. Other shapes covered with white icing can be decorated with candied rose or violet petals, or dusted with macaroon crumbs, or with crushed peanuts. Any book on French cooking will give any number of these little cakes, which they call *petits fours*.



Cakes far the party.

Decorating the Table.

You can set the table for the party effectively by using a center and doilies of crepe paper. There is a considerable variety in these sets, but paper napkins are hardly to be recommended, unless each child is supplied with more than one.

If you want to give each child some souvenir, choose a growing plant. The table looks very pretty with a little fern at each place, a strip of the cretonne folded around the pot, but larger plants must be distributed at the end of the festivities.

A child's party ought to be just as pretty as it can be made, and children are generally very appreciative, but do not let it be elaborate. The money standard may be unavoidable later on but it is a great pity to make children acquainted with it.

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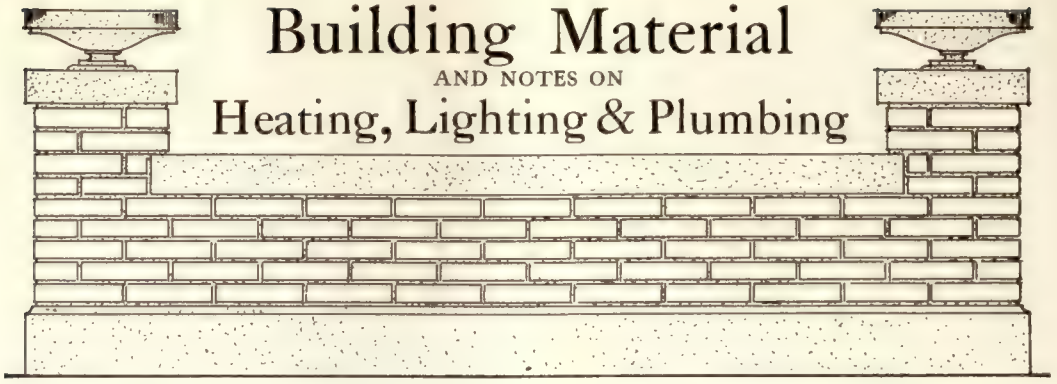
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What Do We Know About a Heating Plant?

EVERY householder knows something about putting fuel into a furnace, but as to how much heat he gets out of it, how much is lost before reaching his apartments, and why, and how, he may know absolutely nothing. When a man is selecting a furnace, he talks to his neighbors and friends. Jones has a furnace which he says is fine. He has only used "so" much coal and the house is always warm. Jones may understand stoking a furnace properly. He may have employed the best contractor who figured, instead of the cheapest, to build his house; and he may be a careful man who looks well after his fire at night. Brown, on the other hand, may be always grumbling about his furnace, especially as he goes down town in the morning. Jones' type of a furnace is likely to be selected; but Mr. Householder may be the Brown type of a man.

There are certain fundamental elements around which the heating problems gather. The heating engineer has been thoughtful of Mr. Householder and has put on the market treatises taking up the especial points of the different heating apparatus, for those who really wish to know, technically, how it is done. To many people, the real connection between the putting of fuel into a fire box in the basement and the comfortable warmth of the living apartments is a veritable mys tery, a usual but no less a real mystery.

The loss of heat in transmission from the furnace to the living apartments is one of the important considerations.

The first cause of this loss of heat lies in the difference of temperature between the outside atmosphere and the inside. The ease with which this loss occurs depends on structure and texture of the wall, whether the cellar and attic are cold, whether the window construction is tight, the amount of glass surface exposed to the weather, et cetera. Many of these are things which count in the first cost of the house, and in which a cheap or light construction may have been adopted as a matter of economy. An economy which takes an increasing toll in the fuel bill year after year is questionable as a matter of economy to the householder, whatever it may be to the investor who expects to rent the property.

When installing a plant, the live heating man will make a point of carrying his pipes as directly as possible. Heating pipes which wander around the house before reaching the outlet into the room to be heated, no matter how well wrapped, must be wasteful of heat in transmission. Especially is this true with hot air heat. With any kind of heat, but especially with hot air, the registers or radiators should be placed in the first planning of the rooms so that the risers shall be as direct as possible. Hot air pipes should go from some place very near the furnace directly to the rooms to be heated, and the furnace so placed to accommodate them as far as possible without elbows or turns in the vertical pipes. Common sense is often applicable even to the most technical subject, and this is certainly the case with the heating plant.

When the house is well built, and the heating pipes may be direct and well placed, then a heating plant will have a fair chance to do its best work. Of the many types of heating plants, each one



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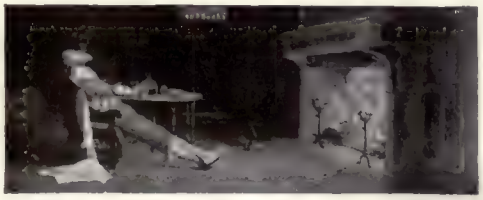
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FIREPLACE EXPERT

has its own theory for producing a complete combustion. It is not the fuel which goes into the fire box that produces the heat; it is the fual that is burned under desired results. Such an arrangement of drafts and grates and fire box as to insure a complete combustion of the fuel is the aim of every furnace. The individual owner may make his selection because he believes one especial type is correct in principle, or he may depend entirely on results and accept the testimony of those who have tried out the different types. Be that as it may, when Mr. Householder has a perfectly good heating apparatus installed, he still has one of the most important things yet before him, and that is its proper treatment and attention.

The campaign for the abatement of the smoke nuisance has had some rather important bearings on economy in the use of fuel. Investigation showed that the great columns of black smoke pouring from the chimneys resulted from an imperfect combustion of the fuel and was a waste to the owners, caused either by the carelessness or lack of knowledge in the stoking of the furnaces. Classes were established teaching the proper stoking and care of furnaces, and some statistics were published as to the relative economy of fuel consumption with and without the black smoke. All of these things are not without interest to the householder.

The quality of the air which we breath indoors is a subject now under consideration by experts. There is very little relative humidity in the indoor air. A lower temperature will give greater comfort if there is a sufficient amount of moisture in the air of a room. Many people are not comfortable unless the thermometer stands at seventy degrees or above. We are told that the reason for this is the extreme dryness of the air; that with a proper relative humidity sixty-eight degrees would give a more satisfying sense of warmth and comfort than the higher temperatures.

Organization of Building Data League.

One of the most unique organizations of its kind is the recently-organized Building Data League, Inc., an outgrowth of the Architects' Bureau of Technical Service. Its membership is made up of consumers, organized to secure through co-operation exact and reliable information as to the quality and relative economic values of the vast number of materials and devices used in the construction and equipment of buildings. The league's purpose is to establish market standards in the building industry, so that the consumer may readily secure accurate information and a working knowledge of available materials, methods and devices. On the other hand, the league will direct the attention of the producer to the demands of the consuming class with a view of securing high standards and methods in the manufacturing and marketing of products.

The investigations of the league will cover: Performance of the product when under conditions of service. Its production, also, including that of the raw materials. The market, including the demand, the adaptability, the cost and difficulty incident to installation and, also, service efficiency.





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THE ARCHITECT'S CORNER

What Is YOUR Building Problem?

Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

To Remove Cement Wash.

J. H. R.: I have read your magazine for some time and having found much valuable information in it, am now writing for some information which I think will not only interest myself but many of your other readers as well.

My house is built of concrete which has been treated to a cement wash. This wash has peeled off in spots and I desire to treat the surface with a cement coating. To do this properly I want to remove the cement wash now on the walls and my query is: How am I going to do it?

Is there any liquid which will remove it without injuring the concrete surface? I have been informed that sand blasting is the best method but my house is located in a section in which it is impossible to remove the cement wash by this method.

Ans.—In regard to the removal of the remaining cement wash on the walls, we would say that in our opinion the sand-blast would be the most economical and thorough method. We think that the second best method would be to allow the building to stand until that portion of the cement wash remaining had become pretty well weathered, and at this stage it might be feasible to remove it far less readily by using a stiff steel brush. We are sure that any plan of using a solvent or chemical for the purpose of removing the material would be unsatisfactory for various reasons, and it is doubtful as to whether there is any such chemical which might be safely used, and, furthermore, it is logical that after having used any such chemical, providing there was one, that it would be necessary to wash the building in order to remove and neutralize the chemical. Taking it all and all it will be seen that any operation of this kind would be very expensive, and very doubtful considering it from the standpoint and utility of effectiveness.

Dampproofing Cellar Walls.

H. R. B.—We are contemplating building a two-story brick house with basement. The ground on which we will build is high but level and is wet during the wet season. Could you tell us what to do to prevent dampness in the basement? We shall lay a cement floor.

Ans.—There are several ways in which this may be accomplished, of which the most satisfactory would be to make the concrete wall sufficiently rich in cement that it will be waterproof. Under general conditions the proportions of 1 part of a good brand Portland cement to 3 parts sharp, clean sand and 5 parts of broken stone or gravel, will make a waterproof wall. Lay ordinary drain tile outside the wall below the basement floor level to carry off water.

Under conditions where water stands on the ground it is recommended that after the concrete floor has been laid, it be mopped with hot tar with especial attention given to the joint between the floor and the walls, where the water is likely to enter. Lay burlap over the tar, which has been carried up the side wall for a foot or more, and then again mop over the burlap with hot tar. The outside of the foundation wall may also be mopped with hot tar if desired.

Another way of meeting the problem is to waterproof the concrete walls. This may be accomplished either by the "integral process" by which th A number of good brands of waterproofing materials are on the market.

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WOODS AND HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

The Timber Supply.

ACCORDING to the best authorities, our potential forest area is large enough to supply all the timber of every kind that we need if it is rightly handled. Here is a field which for years to come will afford great opportunity for the activities of both statesmen and foresters. It is believed that our American forest area of 550 million acres contains 200 million acres of practically mature timber; 250 million acres partially cut and burned over, on which there is sufficient natural reproduction to insure a fair second growth; and finally, 100 million acres so severely cut and burned that, unless supplemented by planting, there will be no succeeding forest of commercial value.

Although four-fifths of the present timber supply is privately owned, it is highly probable that a hundred years hence the bulk of the timber then existing will be in public forests. Because of the long time investment required, the hazard involved, and the relatively low rate of interest obtained from forestry, private capital is not likely to engage in timber growing on a very large scale.

The national forests aggregate about 160,000,000 acres, and are chiefly in the Rocky mountains and along the Pacific coast. They were created by the withdrawal of public land from private entry and sale. Within the last few years, however, the national government has entered upon the policy of purchasing timber lands in the eastern mountains, where forest growth is considered necessary for the protection of watersheds at the heads of navigable streams. Extensive purchases of forest land, most of which have been cut over, are being made in the White and Appalachian mountains.

Probably 75 per cent of the merchantable standing timber in this country is under private ownership at this time. Private capital always seeks the best investment, and these private holdings contain the best standing timber in the country.

Timber Resources of Russian Empire.

One of the lumber journals states that 39 per cent of the Russian empire is estimated to be under forests, which in European Russia cover an area of 474 million acres. Finland, Poland and the Caucasus bring the total to more than 549,000,000 acres, exclusive of Siberia. In the Ural provinces, forests cover 70 per cent of the area, in the northern provinces 68 per cent, and in the four lake provinces, 57 per cent. It is estimated that in Western Siberia alone there are 465,000,000 acres of virgin forest, and Eastern Siberia, while not so richly endowed, has sufficient timber to supply the world's demand for years to come.

Tests for Wood Preservatives.

The Forest Service Laboratory at Madison, Wisconsin, has just completed a series of preliminary tests of wood preservatives, the results of which have been published in a Department (of Agriculture) Bulletin, No. 145.



House of Daniel W. Nye, Esq., Kew Gardens, Long Island, N. Y. *Aymar Embury II, Architect, New York, N. Y.*

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When it was announced that these tests would be conducted, by-products of all kinds were sent to the laboratory for testing—the condensed fumes of smelters, the waste liquors of pulp plants, the refuse of tanneries, the skimmed milk of creameries, and a miscellaneous assortment of compounds. The desire was to find how many of these various compounds and chemicals were really valuable as wood preservatives. Only those which showed some promise were admitted to test.

The tests aimed to bring out the important physical and chemical properties of the preservative, its effect on the strength of the wood, its permanency, its ability to penetrate, the combustibility of the treated wood, the effect of the preservative on paint, and so forth. It was found that the preserving oils had no appreciable weakening effect upon the wood, although water-soluble preservatives did cause some slight weakening. The creosote and oil preservatives were satisfactorily penetrative, while wood-tar was very difficult to force into the wood. Viscous or sticky oils did not penetrate the wood readily unless both wood and preservatives were well heated during the process. Woods treated with oils ignited at lower temperature than those treated with water-soluble salts. Oil treatment rendered the wood unfit for subsequent painting, but water-soluble salts caused no discoloration of the painted surface.

Sweeping conclusions cannot be drawn as yet from the data brought out by these first tests; yet they will serve as a foundation for a study of the most efficient use of wood preservatives.—*Mississippi Valley Lumberman.*

To Protect Wood From the White Ant.

An effort has been made to determine the value, as a protection against the native white ant, of various methods of treatment as applied to different kinds of wood. Dr. A. D. Hopkins has conducted the experiments and submitted a report. A note sent out by the Department of Agriculture at Washington states that in conditions where alternating check stakes were attacked by white ants, after being subject to attack for from 5 to 12 months, yellow pine stakes charred by burning for about five minutes were attacked at the end of one year. This treatment it seems only delays attack. Yellow pine stakes impregnated by the "open tank" method, with coal tar and wood creosotes; dipping and brush treatments with wood and coal tar creosotes; and stakes treated by two closed cylinder pressure processes with several different creosote compounds were not attacked at the end of one year. Untreated alternating check stakes were attacked by white ants.

An examination of test blocks showed that after being buried in the ground with infested logs for nearly six months, some of the blocks impregnated with paraffine wax were attacked by white ants while wood treated with chlorinated naphthalene was not attacked. Untreated teak, greenheart and peroba test blocks—all tropical woods—were not attacked, while untreated white and red oak, sugar maple, birch, and red gum were attacked and more or less seriously damaged.

The Use of Sycamore.

W. S. M.: Please tell us all about sycamore. Can it be used as a finish for inside work? How would you stain it? Will it take a mahogany stain? Is the wood of any value for structural purposes?

Ans.—Sycamore is a wood that is used to a very limited extent in structural work. The box interests employ it largely in the manufacture of cases for chewing tobacco.

The wood has an involved grain and shows a tendency to split and warp in wide stock or long lengths.

The chief beauty is the original color flecked beautifully by the intersections of the medullary rays in all quarter-sawed stock. It is hard and durable. The supply is limited and of the total product, about 30,000,000 feet in 1913, probably 70 per cent was used for boxes and crating.

In the hardwood districts sycamore is used for framing and sheathing with other hardwoods, but in a commercial sense it is not so employed.

If used for interior trim it should be finished natural with white varnish so the beauty of its color and figure will be fully developed.



The brush

leaves a trail of beauty behind it when the woodwork is properly treated with the right varnish. The right selection of varnish is vital, however, and should receive careful consideration.

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The Honeywell Tank-in-Basement method costs practically the same as the ordinary system. It saves running the expansion line to attic and bringing back the overflow pipe, which offsets the increased cost of equipment.

Unit Sash Balances, for use in concrete buildings, which have been put on the market by the Pullman Manufacturing Company, of Rochester, N. Y., makes it possible to do away with the usual box frames for windows, gives a simpler construction, and eliminates another use for wood in fire-proof construction.

The spring is encased in a revolving drum, to the outside of which is attached a steel tape that is fastened to and supports the sash. The spring, in each balance, is graduated according to the weight of the sash it is to carry.

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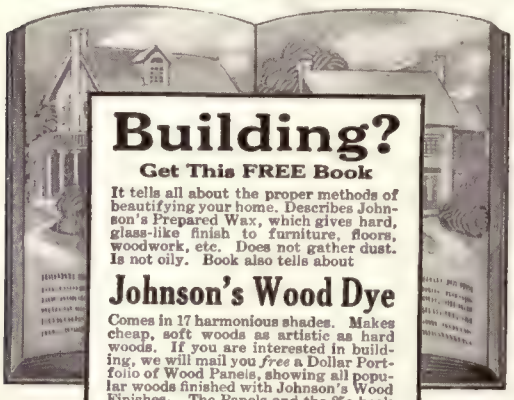
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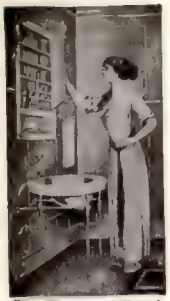
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KEITH'S MAGAZINE ON HOME BUILDING



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The visitor may stop to rest and enjoy the view.

KEITH'S MAGAZINE

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The ranch house.

The Ranch House

Model Farm Bungalow Shown at the Panama-California Exposition at San Diego

PEOPLE used to build "Castles in Spain" in their leisure hours, now they plan a "Model Bungalow" in their spare moments, fitting the location to some lots already bought or in contemplation, or else they plan it "just for the fun of it." A simple home-like house attracts attention even at a great exposition such as those at San Francisco and San Diego, which people from all over the country and from many parts of the world have been visiting for nearly a year. Set at one side of the great courts, beautiful buildings and wonderful vistas, an unobtrusive though very attractive little bungalow catches the eye of the visitor, who finds there quite a different exhibit, though hardly less interesting than those displayed in the great buildings of the exposition.

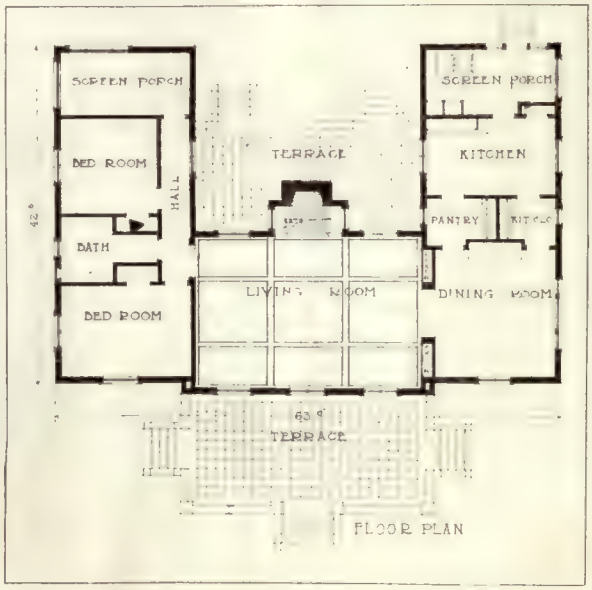
The Model Intensive Farm, a ranch of thirteen acres prepared and built by the seven counties of Southern California as part of their exhibit at the Panama-California Exposition at San Diego, is a marvel to the eastern visitor, with its acre of grape fruit, two or three acres of oranges, an acre of lemons, and a five-acre tract set in trees bearing all the kinds of fruit and nuts one can think of, from English walnuts and apples to figs and all kinds of berries. The budding of various fruits is also demonstrated. Trees budded to as many as thirteen kinds of citrus fruits are already in bearing, showing lemons, oranges, limes and grapefruit and many other varieties growing on the same trees. On another plot fifteen varieties of grapes are compared. On still another plot the new European crop, ramie, the fibre of which makes fine linen, is being tested. Since the out-



The patio is one of the most attractive parts of the house.

break of the war, which stopped the importation of the European product, New York manufacturers have offered alluring inducements to get California farmers to grow ramie.

We are all familiar with the "exhibits" of the fruit, vegetables and other products of the land as they are shown, carefully piled in show cases, or pickled in great glass jars. The seven counties of Southern California decided to have a "growing exhibit" and this is the form it has taken, the fruit blossoming and ripening on the trees, during the year of the exposition, flowers and vegetables in their season.



Two years ago, not only this farm, but the whole exposition park was little more than a desert, sand and sage brush. Now it is a garden fit for the gods, and banked by jungle in which may be found almost every growth of that semi-tropical clime.

The farm is interesting, but it is to the ranch house that we turn our attention. It was built as an ideal farm house, such as the people of Southern California are building, but it would seem to be quite as good a home for a banker or a doctor, for

it is simply the farmer's home. The house for the superintendent of the farm is on the other side of the garden. The house itself is low with spreading wings which form a patio at what might be called the rear of the house. This is another example of the fact that the old-fashioned "back of the house," as a place of refuge for all the unsightly things not wanted elsewhere, has fortunately passed away. The patio and the kitchen porch are, if anything, more attractive than other parts of the house.

The house is stuccoed, with timber work in the gables. There is no porch at the entrance, but instead a tiled terrace, two or three steps above the lawn, with seats on each side of the center entrance. The mild California climate does not require a vestibule and two doors between the outside and the living room, as do the more northern climes, and the three openings from the living room to the terrace are filled with French doors. The seats on the terrace are inviting and many visitors stopped before entering to rest and enjoy the view. The living room is the key to the arrangement of the house, as will be seen by the plan. It opens to the terrace of the patio by French doors beside the ingle-nook.



The ingle and fireplace claim the attention.

Once inside the living room, the ingle-nook and fireplace claim the attention. The fireplace is recessed with high windows over the seats. The fireplace itself is built of brick and perfectly simple, with a bracketed shelf and with a good mural decoration over it. This treatment for a chimney breast is especially noteworthy, for it is a problem which generally confronts the

home-builder. This is not a picture which has been brought from somewhere and hung up over the mantel. It becomes a part of the mantel and could not be removed without spoiling the whole scheme of the fireplace. This emphasizes the difference, not always plain, between a picture, which, in and of itself, is a thing of beauty, and a wall decoration which may be only a spot of color or design needed to beautify a



One catches a glimpse of the buffet.

with their chinz cushions. The dining room is separated from the living room by book cases on the living room side. The dining room has a simple built-in buffet, with both a pantry and a kitchen closet, connecting with the kitchen beyond. The kitchen has a hood over the range built as a hood should be, a vertical wall from the ceiling down to the height of the door, generally seven feet. This does not allow any place



The back door is sightly.

certain place, and perhaps with little value elsewhere. It is a picture in this case as well as a decoration, and is very satisfying. The furnishings of the living room are entirely in rattan or wicker, and make it very livable. Many of the pieces are quite unusual in shape, and very pretty



The living room is furnished entirely in wicker.

for dust to gather over the range except inside the hood, which should be lined with some substance which can be easily washed, preferably of tile or vitrolite, or of tin painted and enameled white. In the photograph of the kitchen, only the lower edge of the hood can be seen over

the range. The kitchen and pantries are well fitted with cupboards and there is a "cooler" built on an inside wall. On the screened porch are the set tubs for the laundry, with a hinged cover, which converts the tubs into a table when they are not being used for laundry work.

Between the kitchen and bedroom wings is the terrace with floor of mission tiles and a cement border. The outside boulder chimney and the recess for the fireplace extend into this patio, which is several steps above the ground and banked with flowering shrubs and vines.



You can see the under side of the hood over the range.

On the other side of the living room is the bedroom wing of the house. The door from the living room opens into a small hall, and from this hall open the two bedrooms, the bathroom and the screened sleeping porch. This arrangement makes the bedroom suite independent of the rest of the house.

The woodwork of the living and dining rooms is of California redwood finished in its natural color. The rest of the house, the kitchen and the bedrooms are finished in pine and painted in white enamel. The bathroom has a tile floor and wainscot. The bungalow was built at an approximate cost of $4,000.

The combination garage and stable is so arranged as to house the motor car, horse, a light wagon, feed, and all the various tools that would be required on a place of this size.

The partial plan of the farm grounds here given shows the arrangement of the farm buildings, gardens and planting of fruits and their relation to the ranch house and the superintendent's house, and the key gives the exact location of the buildings and the planting of the different plots of ground. It is not expected that every farmer would want so large a variety, nor that he would lay out his farm in just this way. The larger building at 5 is the ranch house, 6 is the garage, 4 the superintendent's or the gardener's cottage, 29 is the incubator house, 30 the brooders, 2 and



On the other side of the drive is the house for the superintendent.



The incubator house is attractive.

3 the poultry yards. Vines and trellises play an important part in the entire scheme.

The incubator house is attractive as well as useful, and with a dozen out-door brooders it shows the visitor something about hatching and the day-old chick The poultry pens are well stocked, and they offer a number of valuable suggestions on sanitation and feeding. A green-alfalfa pen for the turkeys is protected by a wire covering six inches from the ground, on which the birds walk to gather their feed.



Rose pergolas screen the poultry yard.

Back of the vegetable garden are flower beds. Wire vine covers the netting at the end of the poultry yards. There is a honeysuckle hedge. Rose pergolas form a screen the whole length of the poultry yards, at 34 on the plan. Flowers and shrubs are massed all about the houses. Narrow beds of cream and red lantana outline the road that divides the farm, the driveways and curbs. A row of double marguerites borders the walk in front of the bungalow. California poppies also are plentiful, while gay poinsettias lift their heads out of the green masses round the house. Window boxes on the house, stable and incubator house contain ivy geraniums and weeping lotus.

A rose covered fence, which encloses the fence on three sides, was gorgeous with several varieties of roses, chiefly Cecil Brunner. "You could have picked hay racks full of roses off that fence in their season and hardly miss them," said the superintendent. The visitor marveled at the variety and luxuriance of the flowers, perhaps quite as much as the fruits.

The "planting plan," that much-abused term, is of more than usual interest because in a way its dominating ideas may be applied by any householder who owns a lot deep enough to have room for a few trees

and a berry patch. Here are planted one row or more of each fruit, where the householder would have one tree or plant. With a little care in the selection of varieties, he may have the luxuries for his table, and yet be independent of the markets. Since the "ever bearing" strawberries and raspberries have proven successful, he may have berries from early spring until frost.



Partial plan of the grounds showing planting.

This model farm was built not only to suggest ideas in cropping and farm betterment to the farmers of the state and of other states, but also as an invitation to the eastern farmer. The farm country of the southwest is scarcely touched. There are millions of idle acres as rich as those already farmed. The Panama canal is expected to open new markets and bring a large increase of trade. San Diego is the first port of call on the Pacific side, Los Angeles is the second. They celebrate the opening of the canal as it brings the commerce of the world to their doors.

Stucco and Shingles

Margaret Craig

A House Near the Foothills

A SMALL, but important cement bridge, leading across the arroyo into a new section of the outlying country district of Pasadena has made it possible for the city to begin spreading in another direction. Until a short time ago, the land of rolling wilds was traversed by only a few roads and scarcely inhabited, save by the mountain lion and the forest rangers.

Now new homes are commencing to spring up in every direction, and as if to welcome the newcomers the freshly completed residence of a well-known banker of Pasadena stands near the western extremity of this bridge that curves in a sweeping line over the old river bed. The house is constructed in the style of an English country home, and as a result of the skill of the architects, Marston and Van Pelt, it is most admirably related to the field and foot-hill landscape, that forms the charming setting.

The lines of the house are irregular, and yet well balanced. Three entrance paths converge, giving a definite accent to the front entrance.

The long, straight walk that leads to the front door is made rather formal, but most effective, by the lines of rose trees bordering either side. This appearance is accentuated by the brick and plaster posts at the entrance topped by bay trees, which also are repeated on either side of the steps that lead to the front door.



The lines of the house are irregular yet balanced.

This doorway is most attractive. The door itself is marked by a pointed hood, and has a brick platform. The three-quarter partition between the pillars that support the hood, forms a sort of vestibule. The effect is unusual and satisfactory with the combination of brown stained timbers and plaster.

The lines of the hood are repeated in those of the roof, which form overhangs at either end, covering the out-of-door porches.

This is all the more interesting as one part of the house swings off at an angle, the intersection being marked by the broad white chimney which forms an important detail.

The porches, formed by these overhangs, are most advantageously placed both in regard to the outlook upon the miles of surrounding scenery, and in relation to the rest of the house, and the pillars that support them add a substantial note.

The broad terrace in front of the house, the series of steps that lead from this to the lower lawn, and the borders of the extending porches are edged with brick, which adds the cheerful note of red to the color scheme. The windows are well grouped, and with the touch of color in the awnings, form a decorative feature.

Garden accessories in the form of benches, fountains and a sun dial contribute a most noteworthy touch of serenity to the grounds. The French formal garden, continuing the lines of the west wing, deserves especial attention. It has lovely color, planted in different shades of white, blue and red. Its chief charm lies in the garden seat at the end, made of white cement bordered with red brick. The touch of color resulting from the insertion of several blue Batchelder tiles and tiny blue wreaths is very pleasing.

Yellow French marigold banks the front of the house, and a glorious bed of gold,



The porches give a beautiful outlook.

brown and purple zenias is arrayed near the north open piazza. A fernery, set off by field rocks enriches the shady north exposure.

A Bungalow.

An interesting house that Miss Grace Packard has recently completed in Pasadena, is an example of a home that is at once practical and pleasing, and is built in a style that is becoming increasingly popular.



The garden seat closes the vista.

The exterior wall covering is of nut brown shingles, which harmonize well with the mountain background. Pergola porches at the front and rear add notes of character. The window spacing is well managed. There is an absence of contrast between the trim and timber work and the body of the house which is very restful.

The owner had several important considerations that governed her plans. The first requirements were that the house should not cost more than four thousand dollars, and yet be fully equipped with every convenience, and also, that it should be substantially constructed. She particularly desired a living room with a lofty ceiling, and a broad fire-place combined with a picturesque stairway, similar to those built in so many of the ateliers of Paris.

The owner discovered on submitting the preliminary plans to the contractor that a rectangular house was far less expensive than one that had interesting wings, breaks in roof lines, and gables. Before starting to build, the contractor made up a list of the various items needed for the interior finishing with his estimates for the cost of



The walls are nut brown shingles.

each item. In this list were wall paper, at a definite amount, lighting fixtures, etc. It was found that by watching for opportunities to buy, where the best materials could be obtained at reduced prices, a considerable part of this amount was saved, to be used in extra details.

Rolling couches in downstairs bedrooms, bookshelves, cupboards, and long covered seats for storing all manner of things, were built in the various rooms. The owner was well aware that all of these additions would save labor in housekeeping as well as contribute to the advantages of convenience and picturesqueness.



The living room has a loft ceiling.

The house is planned with two separate front entrances, so that two families could live in the house if the owner should ever wish to sell or to rent. The first entrance opens into a small reception room. The walls here are grey, and the drapery and upholstery in tones of green. The rolling couch can be made to entirely disappear under the floor of a large closet, —a good idea by which space is saved and convenience added. The other entrance door leads into the spacious living-room at the right of the porch.

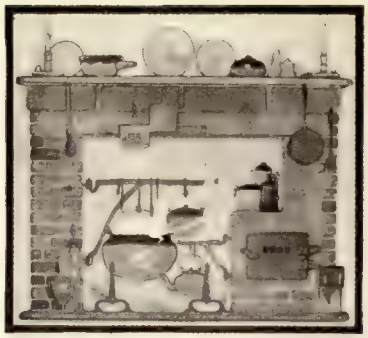
The living-room is forty by sixteen feet, with a ceiling height of sixteen feet, and is quite the dominating feature of the house. It is a room that is airy, not difficult to heat, and well lighted, principally by three high windows with north exposure. The golden brown pine wainscoting extends up about five feet, where it meets the picture rail. Above this is an expanse of tan burlapped wall, which ends in the upper white wall and ceiling. Oriental rugs, in restrained tones of reds and blues are on the hardwood floor and blend well with the mahogany furniture and blue brick of the ample fireplace.

The stairway, with its simple strong lines, forms a very decorative feature. It starts at one side of the west end of the room and ends in the picturesque balcony that crosses the chimney at right angles. The Bokhara rug, thrown across the balustrade unites the fireplace and balcony with its color and its vertical lines.

In the cool evenings, when the fire is all aglow, the room suggests an old English baronial hall, with its wainscoting, its high, raftered ceiling, and its ample space.

The little breakfast room, just off the kitchen, is very attractive. It has white wainscoting, four feet high, topped with a plate rail. Above this is a border of the white paper designed in Chinese baskets holding red and blue flowers. Two small china cupboards are built in the wall. French doors lead to the pergola terrace. A blue and white circular rug beneath the round table adds a pretty note.

The bungalow has proved to be a most livable home and adds another proof that a small home can comprise all the elements that make for contentment.



THE KITCHEN



A Woman's Workshop

PART II.

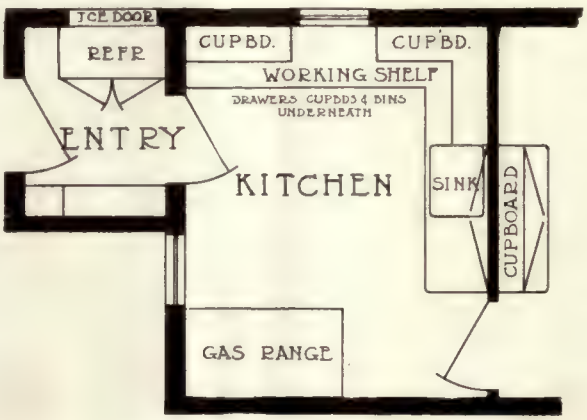
Edith M. Jones

THE watchword of the business world today is efficiency. Offices, factories, workshops of all kinds are establishing the "efficiency plan." This standardized effort aims to secure the greatest amount of work with the least possible waste of time, energy and material. The most vital workshop throughout time has been the kitchen. Every individual depends more or less upon some kind of a kitchen every day of his life. In spite of this I think I can safely say the last industrial center to reflect efficient organization is the kitchen in the majority of the houses of the present day.

The kitchen of the present day, however, is undoubtedly undergoing great changes. We hear on every hand much talk about the "model kitchen." To most of us this is very misleading. One never speaks of a model living room or a model bedroom. Upon reflection one can readily see why a "model kitchen" is as impossible.

For instance, to illustrate with an example quite apart from the subject in hand—let us think for a moment how it would be if one were ordering a gown. The modiste might show several models, any one of which might need to be remodeled to meet the individual need—a change of measurement, of coloring, possibly some part of the trimming left off to lessen expense or a touch of something added to make it more beautiful.

What is true in this example is true in planning almost anything. This is true in planning a house and especially true in the kitchen. No two kitchens can be alike because the needs of each family are individual and call for separate and distinct attention.



The simplest type of the efficient kitchen.

In submitting floor plans and so-called models it is with the thought of showing the possibilities and re-

sources of this long neglected part of the house. Although there can be no one universal model floor plan scientific study of the needs and conditions of the kitchen have shown us that there are fundamental rules which must be considered in every kitchen, whether it is large or small, for the rich or for the poor. The consideration given these rules determines the efficiency and beauty of the kitchen.

Every kitchen must consider:

1. Size or compactness.
2. Grouping or relationship.
3. Exposure.
4. Ventilation and lighting.
5. Sanitary conditions.
6. Side walls, floors and woodwork.
7. Heat for winter.
8. Hot water supply.

The size or compactness of a kitchen is greatly affected by the size of range, refrigerator, sink and requirements as to storage; also by the size of family and amount of work to be done in kitchen. A butler's pantry also affects the needed wall space of the kitchen. The reasons are obvious. Large equipment takes wall space. Much preparation requires a greater supply of utensils and working tables. Large quantities of material take greater storage capacity and a butler's pantry cuts down dish cupboards in kitchen. I am frequently asked to give my opinion of butlers' pantries. Personally I think the added expense is well worth while. It should have a sink and ample drainage or it loses its greatest usefulness. The dining room dishes should never be taken to kitchen, but should be washed in this sink, thus saving many steps, much breakage and further relieving the kitchen of much congestion and confusion. The cost of a pantry sink is in the balance against the time and energy which the housekeeper must spend carrying back and forth.



Kitchen arrangement showing platter cupboard and pantry beyond.

Great care should be used that the distance between the kitchen and dining room should be the narrow way of pantry, thus involving the fewest possible steps.

The second fundamental rule studies the grouping and relationship of the chosen equipment to avoid useless and unnecessary motions.

Under this rule there are four separate types of work to consider in every kitchen and around which every utensil groups itself.

1. Preparation and cooking of the meal.
2. Serving the meal.
3. Clearing away of food and cleaning up.
4. Storage of food materials and utensils.

These are the four functional demands and the successful circulation of the work depends upon the best grouping of utensils employed. For instance—

Preparation requires within easy reach of each other the following groups:

Range, work table, cooking utensils, refrigerator and supply cabinets, bins, etc.

Serving process requires:

Dish warming equipment, trays, carving utensils, and platter closet.

Clearing process:

Refrigerator, sink and towel equipment, dish cupboards and pan closet.

Storage:

Extra dish cupboards, extra supply cupboards, table board closet, broom closet.

Exposure.

The placing of the kitchen in relation to the rest of house, the doors and approaches is most important. Because of the seriousness of this point many wise people begin with the kitchen and plan the rest of the first floor to fit its needs.

Ventilation.

A most important thing in every kitchen is the matter of ventilation. Secure cross ventilation when possible. When cooking a top outlet should always be open to carry off odors and smoke. Every range should be properly vented that the products of combustion, the steam and grease of cooking may be carried off. The vent pipe should carry above the roof and be of sufficient size to insure its proper working where the gas range is used.

Provide ample artificial as well as daylight for the range and sink. Great care should be used that the worker does not stand in her own light. Direct sunlight is necessary for every kitchen for some part of the day.

Sanitary Conditions

These especially involve the plumbing and drainage of sinks, refrigerators, etc., but this also applies to every other part of the equipment and especially the care and use of utensils.

Much of the beauty of kitchen depends upon the choice of color and material of side walls, woodwork and floor. The choice of materials in each instance should be made with an idea of the minimum amount of care necessary to keep kitchen clean and attractive. Eliminate every ledge, crack and corner. Ledges can be overcome by filling space to ceiling with overhead cupboards—these can be used for the storage of materials not constantly in use. Cracks should be avoided because they are hiding places for dust and vermin. Rounded corners should be used wherever possible.

Every kitchen needs heat for winter and provision for hot water throughout the year. Ordinarily the heating plant provides hot water for the winter months, and a gas or coal heater installed in basement provides for the summer months.

Every kitchen should be as small as possible, with ample equipment and storage, but stripped of everything unnecessary.

Provide the best materials and equipment that can be afforded, for nothing yields greater returns in the welfare and comfort of the family than a well equipped and wisely managed efficient kitchen.

Homes Recently Built

Contributed by Keith's Readers

NOTHING is so interesting to the home builder as a house, and more especially the home of a friend or an acquaintance, in the process of construction. In looking through a house one can nearly always distinguish between a "house built to rent" and "somebody's home." Limitless possibilities are before it while the house is still building. The visitor notes the conveniences and the clever way in which certain problems have been solved, and his wife decides she must have certain things, or that with some little convenience another vexing question may be settled. The other man's house helps him to make his own home more to his satisfaction.

When their homes are completed Keith's readers often send photographs and some little comment. Those who have been studying the plans would like to know how they came out. Here are a group of these homes, many of them photographed by the owners themselves. Some of these you may have seen among the designs. Perhaps you may have, yourself, just completed a home which you feel solves some other problems than those shown here. Other home builders would like to see what you have done. When you send the photographs try to send ones that shall be satisfactory and give an adequate idea



A charming home in Michigan.



This Louisiana home has an inviting veranda.



A compact home in Wisconsin.

of the house to one who has never seen it.

When a man builds a house he not only provides his family with a home which will be more or less satisfactory to them, depending on the wisdom of his planning, but he also adds a distinctive feature to the neighborhood in which he has built. A vacant lot whether beautifully green, or disfigured with debris and rubbish, has been changed. In real estate terms the lot is "improved." Some times as a matter of fact it is not an improvement. But this is what the builder is doing: either he is making his neighborhood a better place to live or he is not fulfilling his opportunities.

A man builds the interior of his house for himself and his family, but he builds the exterior for his neighbors to live with. Here is a charming little home built in Michigan. The house itself is very simple. The posts of the porch have been given the same treatment as the walls of the house. The vines make an effectual screen for the end of the porch, and the placing of the flower boxes is effective.

Another home built in Louisiana has an inviting veranda the full width of the house and with clambering vines and porch baskets. The great dormer filled with casement sash pleases the eye and carries the interest above the porch. The owner regrets that the photograph is "not so good as it might be as it does not show the pretty south gallery." It expresses comfort in a sunny southern clime.

Quite different, as might be expected, is the compact house built in Wisconsin, which shows that it was built to keep people warm in the most severe weather. When asked what changes they would make if they were starting now to build over again the owners said that they would make the kitchen smaller, as small



Set among birch trees in Michigan.

as might be, and add the space to the dining room. People are coming to realize that the small kitchen, when it is planned for convenience, saves much work for the housewife. The owner says "The feature I like best about my house is the living room with the bookcases, fireplace and seat on the inside wall at the end of the living room and the kitchen on the other side of that wall. The kitchen is entirely isolated, and when entering the front door one gets just a pretty view through to the dining room which is in blue, the walls in panels of delft blue leatherette. In speaking of the plans and specifications says that even though it might have cost him a little more in this way, he has what he wants and that is worth the difference in price, for "if one has to live in a house and be discontented there is really nothing to live for." In owning one's home the improvements made are for oneself. It also gives one a right to say something about the street improvements. The owner also mentioned the convenience they had found in having the refrigerator built in the wall of the entry, with the doors facing in the kitchen while the ice door opens on the porch, so that the refrigerator could be filled without the ice man



In the Selkirks of Canada.





A substantial home in Texas.

the owner comments on the carpenter losing no time figuring out what he is going to do as everything was carefully planned and specified. The owner purchased the materials used in order to be sure that there should be no substitution of inferior materials, and that the lumber should be of the quality called for. He

tramping through the kitchen to the detriment of the floor and the temper of the cook.

Another home set among the Michigan birch trees has a magnificent setting, though the views which show the setting are not so good of the house. It has the beauty of the white house among the trees.

Another home comes from the Selkirks

of Canada. The photograph does not do justice to the house because it is still too new to have the shrubs and vines about it which a few years will bring, and which add so much to the beauty of the older places.



An interesting home in Pennsylvania.

Next is shown a substantial home in Texas. Two views are given, the front facing south, and the east side. The side view shows the entrance at the grade level, which presumably leads down to the basement and up a few steps to the first floor. This view also shows the well beside the rear porch and the arbor over it. Above one sees the windows of a sun room or sleeping porch.

Another interesting little home built in Pennsylvania, has the second floor rooms under the roof, giving practically a full story, with the dormers and good windows in the gables.

This home, built in Ohio, has a porch across the front of the house swinging on an eighteen-foot circle at the side and extending back fourteen feet. The house sets well back from the street. The roof is of slate, giving a good color and a protection against fire. The living room library and dining room are finished in oak, the rest of the house in quarter-sawed yellow pine.

On the second floor two good rooms have been finished and two storage closets.

Vines, ferns, and the growing things show their appreciation of the owner's care and make his home attractive.



This home was built in Ohio.

"Rest Cottage"

NAMING one's home is rather a pretty idea, when the name fits so well as to give it meaning. It is a custom of the old countries, which has never seemed to flourish here, to any great extent. Rest Cottage is certainly a desirable name for a home, especially if the name can influence conditions.



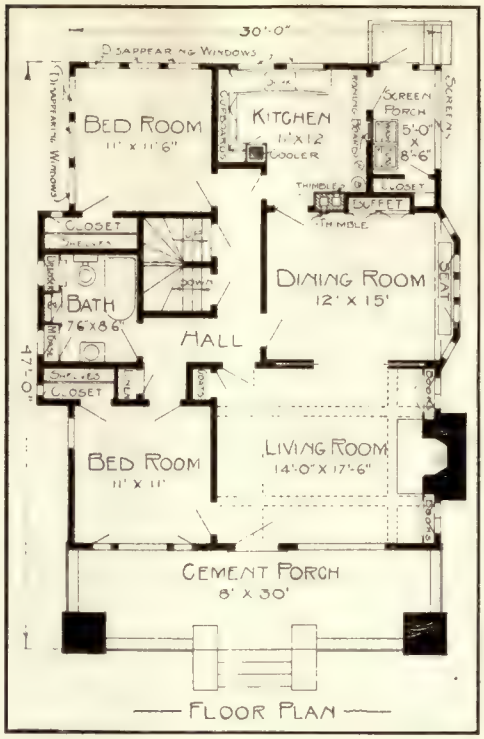
"Rest Cottage." *George Palmer Telling, Architect*

The five room house forms the nucleus for the larger house. Five rooms well arranged on one floor may be extended or rooms finished on the second floor to give as many rooms as may be desired, but the initial arrangement is vital to the house.

"Rest Cottage" presents a charming exterior with an excellent arrangement. The entrance is directly into one end of the living room. The dining room connects with the living room by a wide opening, but may be shut off when desired by sliding doors. The bed rooms and the bath room are formed into a suite by the connecting hall, which also connects with the kitchen and living room. The living room is very good in size, being fourteen by seventeen feet. A great fireplace with book cases and high windows over fills the end of the room. The outside chimney is built of boulders as may be seen by the photograph and the fireplace and chimney breast, where it extends into the living room, is also built of boulders, with an opening sufficiently large for a great roaring log fire.

A bay of five windows fills one end of the dining room, with a seat under the window. It has a built-in buffet opposite the living room doors. Twelve by fifteen feet gives a good-sized dining room. The bed rooms are not large but they have good window and wall space, and

each has good closets. A linen closet opens off the hall and a coat closet is opposite, opening off the living room. The bath room is unusually large with a built-in dresser and medicine closet. These cupboards in the bath room are the source of great comfort and convenience. From the hall, stairs lead down to a cement cellar, and over these other stairs lead up to the attic space under the roof, which may be finished for sleeping rooms if desired.



An unusual feature of this house are the windows in the bedroom and kitchen. They are called "disappearing windows," and they change these rooms into sleeping or screened porches whenever desired, and in a very simple manner. The window stool is hinged and the window, which is on weights, may be dropped down into a pocket in the wall, leaving the entire space open, thus turning the bedroom into a sleeping porch, and making an outdoor kitchen. A storm comes up, or a cold wind, and with a touch the windows are again in place.

The kitchen has good cupboards and a "cooler," built on an inside wall and ventilated at the top and near the ground, so it is always cool. Another unusual feature of this plan is the ironing board fitted into a pocket in the wall when not in use, or so that it can be dropped in position ready for work. On the screened porch are set the tubs for the laundry work, and beside them is a closet. Think how many steps are saved by having a closet beside the wash tubs, and how many things would go into it with scarcely an extra motion. The entire house is planned with thought for the housewife and in the endeavor to save her unnecessary effort.

The exterior is very simple and as often the case with simple things it is very attractive. Cobble stones have been used very effectively in the porch and the outside chimney.

Wide projecting eaves over the dormer as well in the main roof are effective, with their exposed rafter ends.

The Narrow Lot

THE real estate man has wished the narrow lot on the home builder. Not only is this true in the crowded cities, but to a much larger extent than is necessary in smaller places where there is no congestion of the population in a given vicinity, and no other reason for the small lot than the fact that people will accept what is offered and seemingly forced upon them rather than take the initiative in an effort to get what they want. If people will buy a forty-foot lot and pay practically

the same price for it that they would for a sixty-foot lot, that is the way new additions will be platted. So many houses have been built by the investor with the idea of selling before the house is completed, that he has not felt it necessary to consider very fully the matter of depreciation of values when other houses shall have been built on each of his lot lines. But to the owner of a home this is a very important matter. He puts a good house on his lot and the value of the property should increase with the passing years if he keeps improving both house and grounds as the change of times suggests, but what can he do with a narrow lot? On the other hand how much more attractive would the same house appear on a fair-sized lot; how much more air and sunshine would he get, when air and sunshine mean so much to growing children; and how much would an extra fifteen or twenty feet increase the value of the property should he wish or find it necessary to sell.



Here is a design planned especially for a narrow lot. *W. W. Purdy, Archt*

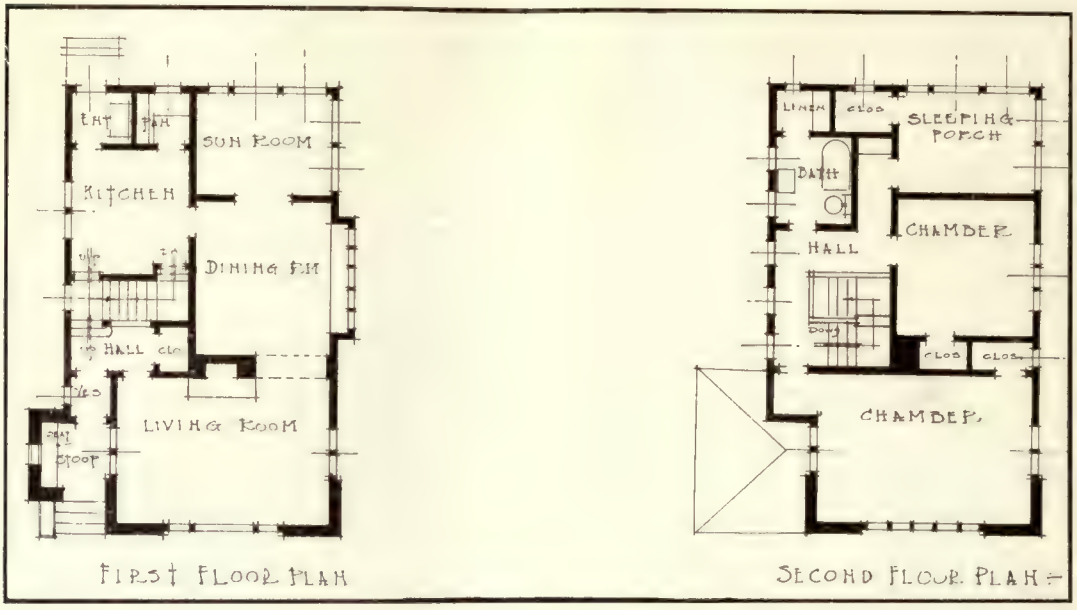
Knowing the disadvantages of the narrow lot, the architect must plan to utilize what space he has at his disposal in the most advantageous way. Here is a plan designed especially for the narrow lot. The entrance is at one side through a covered stoop, which has a seat built in on one side, and a vestibule, into the stairway hall. A coat closet is conveniently near the entrance. A good sized living room fills the front of the house. The wide fireplace is the central feature of the room, and forms a recess through which the dining room is entered. A bay of five windows fills one side of the dining room, and beyond is a large sun room which is entered through French windows. The sun room is fitted with casement sash and screens. From the kitchen two steps lead up to the stair landing so that the main stairs can be reached either from the hall or the kitchen. The basement stairs are under the main stairs, with a door at the other side of the kitchen. Working shelf and bins are in the pantry under the window, while cupboards fill the other side. This arrangement allows the baking to be prepared outside of the kitchen. There is space for the refrigerator in the entry.

On the second floor the front chamber is unusually large, light, and airy. The third sleeping room is really a sleeping porch, as two sides are glazed. It has a good closet, as have all of the rooms. The

bathroom is centrally located, and has a large linen closet opening off of it.

There is no attic but the insulation between the roof rafters prevents the bed rooms from being hot in summer. The basement is complete with laundry, fuel and furnace rooms.

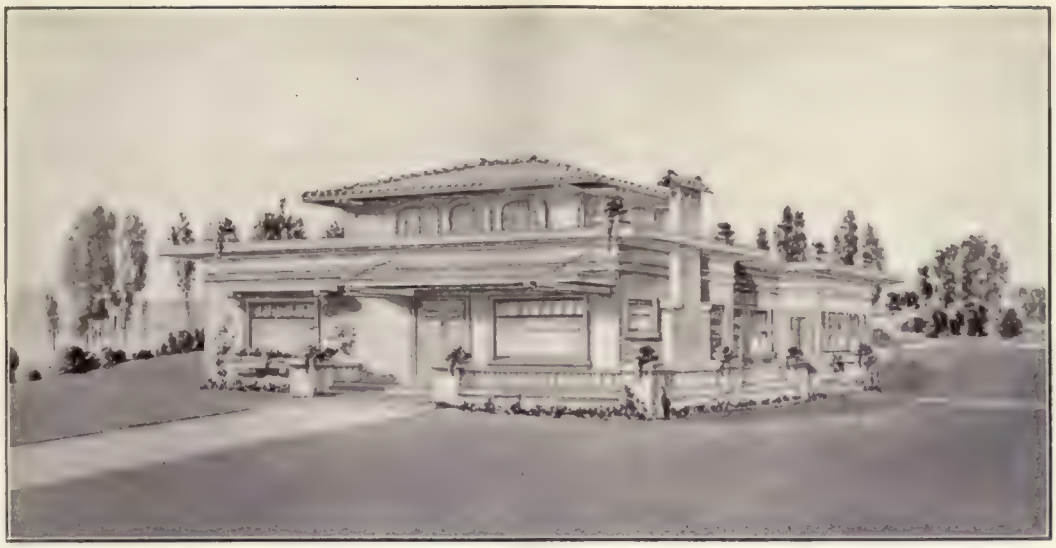
Rough cast white cement plaster has been used on the exterior walls and on the soffit of the cornice.



A House with a Roof Garden

CROWDED communities are beginning to take advantage of the roof space and utilize it with the design of their buildings. The home builder has not as yet given much thought to the possibilities of the roof. For that reason we are glad to show this simple "bungalow plan," with a real sun parlor on the second floor, which has a balcony all around it. This second floor room will be very light and airy, either open air or enclosed as desired, and may be used for smaller sleeping rooms, or a large room. The roof of the second story has wide overhanging eaves and a tile roof. A terra cotta tile may be used, or some of the metal tiles may give a very good appearance. The roof of the main house is covered with sheet roofing and serves as a balcony about the sun room.

A terrace extends nearly around two sides of the house. The front entrance is protected by a canopy but the rest of the terrace is uncovered. The living room and dining room are separated only by bookcases. The fireplace and seats make an Ingle of the end of the living room. The den, adjoining the living room, is fitted with one of the newer types of "disappearing bed." When not in use the bed is pushed back into the space under the stairs and in one end of the dressing room, only projecting into the den under the desk, or making a seat if the desk is not built-in. The dressing room has space for a dresser and for per-



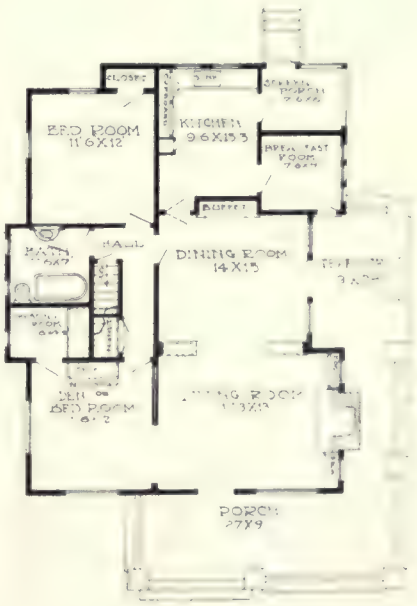
A real sun-parlor on the second floor. *Bungalowcraft Co., Archts.*

sonal articles which would not be in place in the den. Such an arrangement permits a room to serve this double purpose in a satisfactory way and not as a temporary makeshift. The small private hall connects the den as well as the bed room with the bath room, and with the rest of the house.

The dining room has a built-in buffet opposite the living room, and opens on the terrace by French doors. The kitchen is fitted with cupboards, a well lighted sink, a "cool cupboard" and a good screened working porch. The small breakfast room is well located, opening directly from the kitchen and with a glass door onto the terrace. One side of the room is filled with windows.

The breakfast room holds rather a unique place in modern planning. Originating in the great mansion where it was unnecessary to open the great dining room for the morning meal, it has been accepted by the housewife who is her own cook, as a means of simplifying her manifold duties. It is a room which easily adapts itself to manifold uses. The August number of Keith's devotes some space to the breakfast room, its uses and its treatment.

The house is of timber construction, with heavy wood framing sheathed with inch boards. This is covered with metal lath and given three coats of cement stucco. The architect tells us that this house has just been completed in California for $4,000, which would be increased by $500 more in a locality where complete basement and heating plant must be included.



A Two-Story House That Is Up-to-date

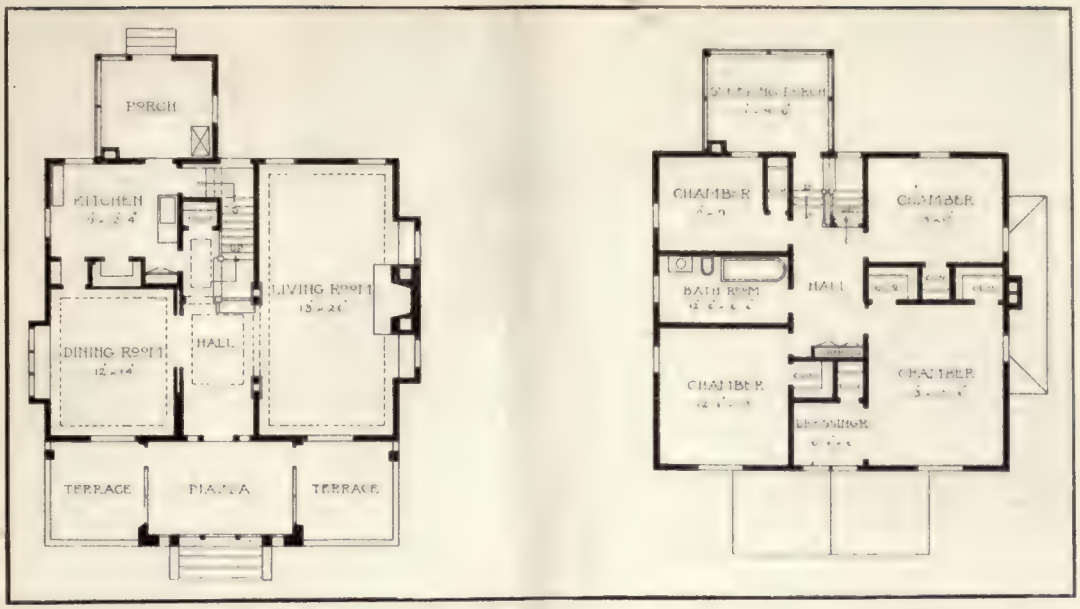
TWO things have influenced people to build what used to be called "story and a half" houses. It seems that they ought to be cheaper because they are not so high, and perhaps not quite so large, and on the other hand the broken roof lines and the dormers, if well handled, add a larger element of the picturesque. As to the rooms under the roof, while they are not so large, at the same time they require more framing, and sometimes add in labor what they save in material. As to the element of the picturesque, we may hope to achieve it accidentally, but it is really an art to be attained through its own proper channels. The architect devotes the best part of his life in learning how to accomplish this, among other things, for you.



The second story overhangs the terrace. *Chas. S. Sedgwick, Archt.*

This is a full two story house, with the second story overhanging the terrace by a small space. There is a covered piazza at the entrance which is screened for summer use and glazed in winter. One enters a central hall with the living room on one side, opening with a wide columned arch, and the dining room on the other side which may be closed off with sliding doors. Beyond these openings is the main stairs which fill the farther end of the hall. The stairs start from a platform and two steps, so arranged that they may be used from the kitchen as well as from the front part of the house, so that rear stairs are not needed. Under the last run of the stairs is a good coat closet, opening conveniently from the hall.

The main living room is very attractive, with windows on three sides, and is recessed for seats on either side of the wide fireplace. The living room is finished in oak with oak floors, as is the hall and also the dining room. A bay in the dining room gives place for the built-in buffet with windows over it. A small pass pantry connects



the dining room and the kitchen, with a good storage pantry beside it. The kitchen opens into the main hall, and should have a spring hinge on the door to insure its being kept closed. The stairs to the basement are under the main stairs, with an entrance at the grade level, giving direct communication from the outside. Beyond the kitchen is a partially enclosed working porch which is screened, and which has a place for the refrigerator. The woodwork of the rear portion of the house is of pine which has been given a natural finish.

The second floor has four good chambers, a large bathroom and a sleeping porch. From the large front chamber, which is presumably the owner's, there is a dressing room, which has a closet in addition to the two good closets that open directly from the room. There is a linen closet in the hall and each chamber has a good closet. The sleeping porch is reached from the landing of the stairs, or it may connect with the adjoining bedroom. The second floor is finished in pine and painted in white enamel, with birch floors.

The large attic space has been left unfinished in this estimate. There would be space for three rooms and storage if desired. The architect estimates that this house, exclusive of heating and plumbing, can be built for an amount varying from forty-five hundred to fifty-four hundred dollars, which gives a wide margin for variation of details and conditions. The size of the house is 34 feet by 29 feet, with the greatest width facing the street. It is of frame construction with concrete foundations. The basement is 8 feet in the clear. The walls are back plastered and then plastered again, leaving a good surface for the finish of the rooms. The exterior of the house is finished with cement stucco on metal lath.

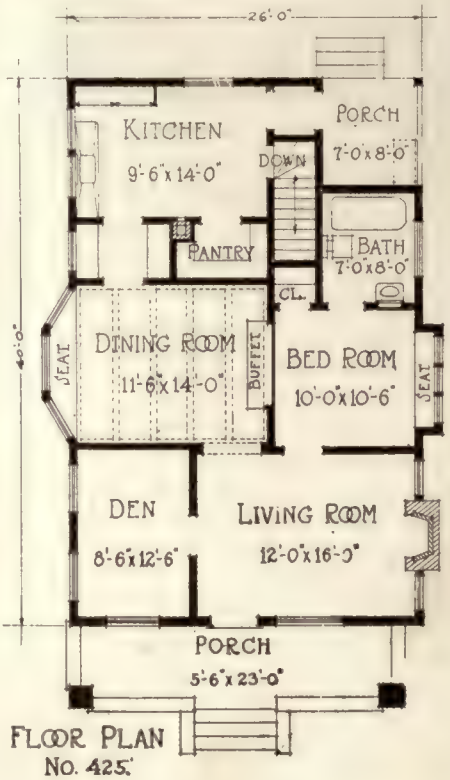


A Small Bungalow

A bungalow with cedar lap-siding. *Jud Yoho, Archt.*

THE matter of intercommunication between the rooms is a great feature in laying out the plan. Shall the rooms open off the living room or off the dining room, or both, or shall space be taken for a hall from which all the rooms shall open? Where the conditions are such that one can have a private bath room in connection with one's bed room, it is a great luxury to have it open directly. This house is not large, twenty-six feet in width, accommodating it to a narrow lot, yet the rooms are fair sized. In plan the living room, which is twelve by sixteen feet, has a good fireplace at one end and the den opens from the other end of the room. Beyond the living room is the dining room, with a buffet at one end and a bay and window seat at the other. A serving pantry connects the dining room with the kitchen, adjoined by a storage pantry. The kitchen is well supplied with cupboards. The storage pantry is a luxury, which will be appreciated by the housewife. The sink is well lighted and conveniently placed with relation to the cupboards. Dishes may be washed and put away without a second handling. The stairs to the basement open from the kitchen in a convenient way, and the screened porch has a good working space.

The living room, dining room and den are finished in slash grain fir, with plain oak floors. A beam ceiling is shown in



FLOOR PLAN
No. 425

the dining room. The bath room is finished in white enamel. The fireplace in the living room is designed to give a maximum of heat. The detail shows a mantel which may be carried out in brick of any color or texture suited to the finish and furnishings of the room and the owner's taste, to make it the heart of the house.

The exterior is covered with a wide siding; six-inch cedar lap-siding is here used with trim of surfaced fir.

A Charming Home

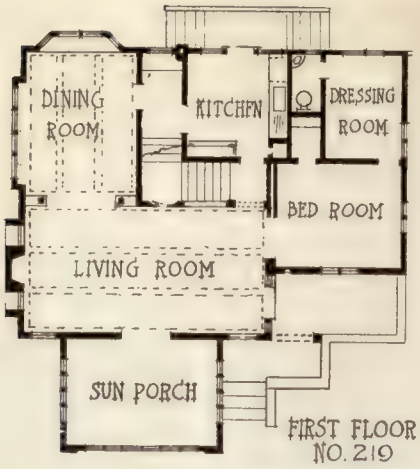


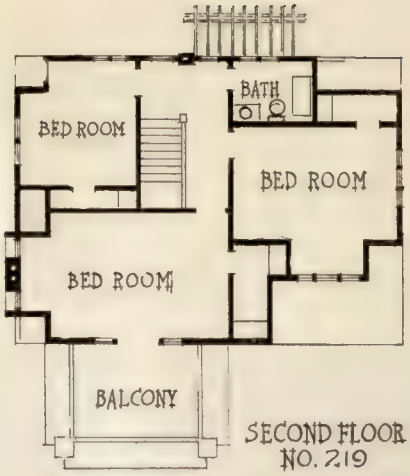
This charming home has attracted much attention. *Lindstrom & Almars, Archts.*

BUILT on a quiet boulevard in an unspoiled suburb, this home has attracted considerable attention. It is very picturesque in its setting of trees. The main roof with its wide, overhanging eaves extends down over the main entrance and, carried on brackets, protects the terrace as well. The sun porch is a charming room as well as an open porch. The verticle lines of the casement sash and the tiled hood over them, the texture and color of the tiled roofs, the curved lintels of the window and entrance all give character to the house.

The roofs are of vitrified tile. The walls and gables are all stuccoed over metal lath on frame construction, the surface being carried unbroken to the ground.

The view on entering is very attractive. Opposite, at the farther end of the living room, is the wide brick and tile fireplace, recessed to bring the chimney breast flush with the wall. A columned opening, with bookcases in the pedestal, connects the dining room with the living room. Both living room and dining room have beamed ceilings. A buffet of special de-





sign, with mirror and windows above the shelf, is built into the dining room. The living room has light on three sides. It connects with the sun porch by French doors. The inward swinging casement windows on the sun porch allow all of the window space to be thrown open when desired. Sliding doors shut off the bed room from the living room. Connected with the bed room is a good dressing room, a private bath room and a good closet. This makes a very complete little suite of private rooms. The stairway makes another attractive feature. It may be entered either from the living room or from the kitchen.

In the kitchen is a sink with good tables. Kitchen and pantry cupboards are built to the ceiling. The ice box is well placed.

On the second floor are three bed rooms with large closets and a bath room directly over the bath room on the first floor and the kitchen sink, bringing all of the plumbing in very close connection and at a minimum expense. A balcony over the sun porch opens from the front bed room. The woodwork on the second floor is finished in white enamel with the doors in mahogany.

On the first floor the main rooms are finished in quarter-sawed oak, the bed room is finished in Circassian walnut. The rest of the first floor, kitchen, pantry, etc., have birch woodwork, finished in the natural color.

All of the ceilings are tinted both upstairs and down. The walls of the living room are covered with Japanese grass cloth. The dining room walls are covered with cloth before being decorated. The kitchen and bath room walls are covered with sanitas. The sun porch has special decoration on sanitas.

In addition to the usual provision for furnace and fuel rooms, laundry, fruit, vegetables and storage, a billiard room has been fitted up in the basement. Outside stairs have been provided for the basement as well as the stairway from the kitchen which goes down under the main stairs.

Especial attention is called to the completeness and compactness of the first floor arrangement. The private suite allows the mistress of the house to go back and forth between the bed room and the kitchen with very few steps, and yet the two may be completely secluded when desired. Conservation of energy for the housekeeper is one of the phases of the ever-present servant question, in which the architect may be a powerful assistant.

Homes of Individuality

Selected by W. J. Keith, Architect

After the Manner of Our Fathers

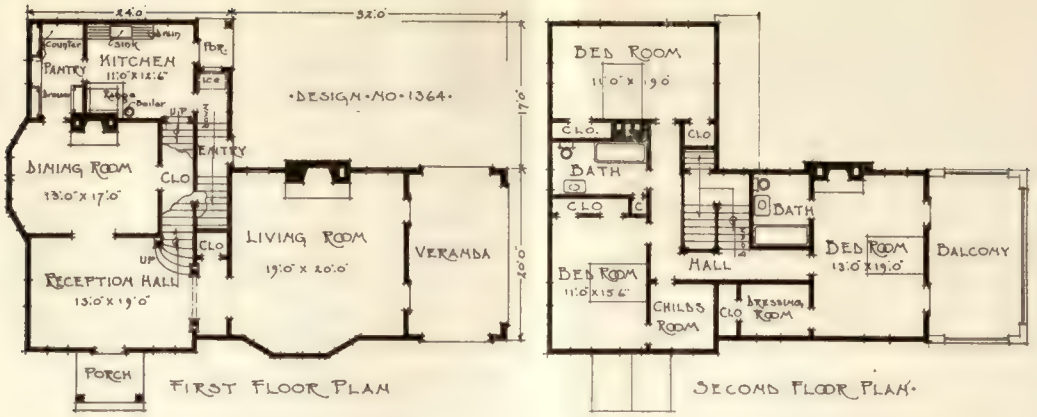
NO one type of house, perhaps, has so many admirers as the white house with green blinds, especially when placed in a setting of trees. Here is such a home which has the dignity of the colonial mansion and the convenience of a modern home. It is compact in its arrangement but the rooms are fairly large, and are so placed as to give an unusual amount of light and air; such a house as may be built anywhere except on a narrow city lot. The living room must always be cool, it would seem, even on the most sultry day, with windows on opposite sides and the veranda beyond. The wide fireplace makes it cosy on the dreariest day.



Such a home as one sees in the Berkshire Hills.

The entrance is into a spacious reception hall, with a wide opening into the dining room on one side, and into the living room on the other side, with a convenient coat closet between. The stair arrangement is attractive, very compact, and the stair landings are cleverly planned to bring each run of stairs to the desired location. Short flights of stairs, one from the reception hall and one from the kitchen reach the same broad landing and continue to the second floor, as shown on the second floor plan. From the kitchen entry three steps lead down to the grade entrance and continue to the basement under the upper part of the main stairs as shown on the first floor plan.

The kitchen arrangements are very compact and convenient. The ice box is in the entry with an ice door reached from the porch. The sink is well lighted, with good tables on either side. Care should always be taken to see that the kitchen sink is set high enough to avoid that tiresome stoop of the shoulders in washing dishes which does so much to tire the housekeeper when she is using a low set sink. The pantry is large enough to ac-



commodate a good work shelf with a window over and bins, cupboards and drawers under the counter, which extends around two sides of the pantry. In addition to this the pantry is well equipped with cupboards.

The fireplace in the dining room is back of the range in the kitchen and one chimney takes care of both. A great bay window fills one end of the dining room.

On the second floor a suite of rooms has been planned for the use of the owner. The bedroom, which has a good fireplace in it, has a private bath room opening from one end of it, and a dressing room with a good closet in connection. The general bath room opens from the main hall which connects the other bedrooms. It is noted that by a somewhat different arrangement and slightly increasing the dimensions, one or even two additional bedrooms could be secured.

There is a full basement under the entire house, and the total width, including the sun porch, but not dining room bay, is 56 feet; depth 37 feet, not including living room bay or hall projection.

The exterior of this house is intended to be wide and heavy weather-board, painted white with green sash and blinds, and a dull faded-out moss green shingle stain for the roof.

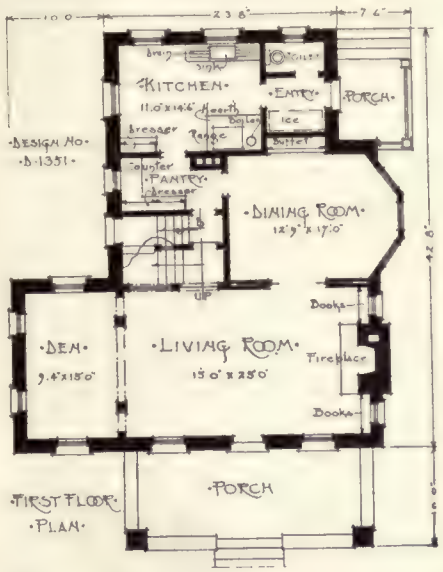


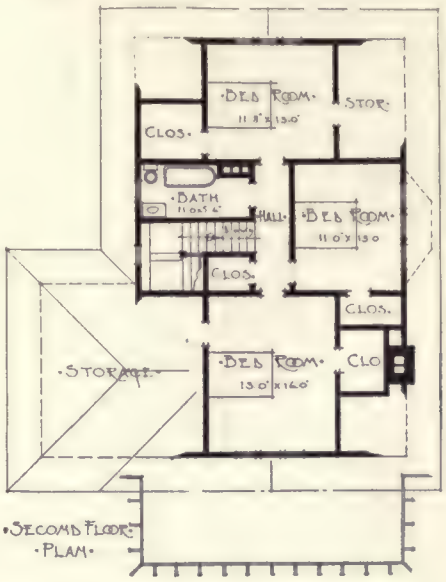
Split quarry stone gives texture to the wall.

A Seven-Room House.

It is interesting to study plans which are similar in general arrangement, yet totally different in treatment and in size. This plan of a comparatively small house has points of likeness to the larger plan just shown. The entrance is into the living room, from which the stairs lead up. Back of this is the dining room, with sliding doors between, and at the end is the small porch could very easily be enlarged and arranged for outdoor dining.

The living room has, in reality, the width of the den added to its own length making it an unusually attractive room. The fireplace, with book cases and high windows over them, fills one end of the room. The stairway, which starts from the center of the length of the combined rooms, is partly screened, so as to be more





den. The basement stairs go down under the main stairs with an outside entrance at the grade level. The first landing is up only one step and a door opposite the pantry gives a direct connection on the kitchen side.

A bay of windows fills one side of the dining room, which has a recessed built-in buffet. The working shelf with its bins, cupboards and drawers is placed under a window in the pantry, which has good cupboard space beside. In the kitchen is a cupboard near the range. The sink with its drain tables is placed under a window. The ice box is in the entry. A toilet which is shown as opening off the entry is very conveniently located. The conveniently used from the rear of the house.

The second floor has three good rooms and a bath, in the space under the roof. The front and rear chambers are lighted by the windows in the gables, and fairly large dormers light the other room and the bath room.

The exterior of the house is very picturesque, built of split quarry stones to the broad overhang of the eaves, and gives the effect of a house all on one floor. The gables and dormers are shingled like the roof.

A basement extends under the entire house and is provided with laundry, fuel bins, and storage rooms.



Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

Color Courage

A GREAT deal of our decoration is feeble and ineffective because we have not the courage to use strong color. We are wedded to low tones, and too often low-toned is merely a synonym for washiness. Walls are distempered or papered in pale colors which would be charming for bridesmaids' frocks, but are absolutely ineffective as backgrounds for furnishings, for pictures and for ornaments. A great deal is said about pastel coloring which is misleading. Pastel colors are not pale colors, they are strong colors toned down. I have had occasion before this to quote the saying of William Morris to the effect that we should use clear, bright color in our rooms, that if mud was needed there was a plenty of it in the road.

I am quite aware that I have been, and still am, a consistent advocate of a neutral toned scheme of color for the average house, especially for the house of moderate size, whose ground floor is so arranged that every room is more or less visible from every other. But every rule has its exceptions, and when the rooms of a house are fairly large, and when, as is the case with houses of the Colonial type, each room is isolated from the others by ordinary doors, which are frequently kept closed, strong color schemes can be used with much success. Indeed the larger the room the more desirable the employment of a wall of strong color, especially if the furniture is antique or modern reproductions, because a room furnished in that style should never be crowded with pictures and ornaments, and great expanses of neutral tinted wall are extremely uninteresting.

The Charm of Red.

I have had occasion to mention the return to favor of red. The best reds for decorative work are not pure reds, but have a blue tone. The best red is what used to be called crimson, which is at its best in the old, red, Italian velvets, whose color and exquisite patterns are a constant source of inspiration to designers Such velvets are generally to be seen in the shops where antique furniture is sold, and a study of them is the best guide which I know of for the person who meditates a room in red. Something, indeed, is to be said for the use of vivid scarlet, but the deeper shades of pure red are seldom advisable for walls.

The Scope of the Red Wall.

Red has, more than most colors, its limitations, especially when applied to walls. It is emphatically a color for the dining room or hall, rather than for the living room or drawing room. It has an irritating effect on the nerves of some people, and is rather trying to the eyes, which makes it desirable to confine its use to rooms used only for part of the day. It has, too, the effect of making a room seem smaller than it really is, and that quality also restricts its use. It needs sunshine and I think it is at its best in a dining room with a southeast exposure, which gets the early morning sun, and indirect sunshine at midday. As the evening meal is generally eaten by

artificial light, the lack of sun in the latter part of the day is immaterial. Red absorbs a good deal of light, but a large dome will shed the light onto the dining table and the dimness of the rest of the room is immaterial.

If the furniture of the dining room is mahogany, the woodwork should be white; if it is brown oak, the woodwork should be stained or painted to match. The darker tones of mahogany look best against a red wall, the lighter coloring being too red and of a conflicting tone. Golden oak, which is generally impossible, is not quite hopeless against a crimson wall, and old-fashioned walnut furniture is very good indeed.

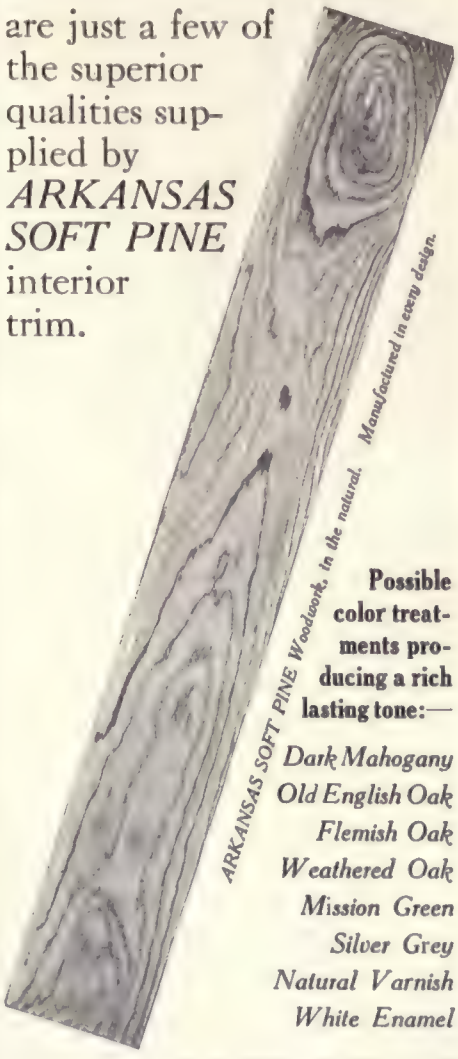
The charm of the red walled dining room, apart from its cosiness, is that it is such a capital background for the sorts of things one has in a dining room. It looks awfully well with oil paintings, with silver, with brass, with most sorts of china. Blue china does not affiliate with it, but not everyone owns or cares for blue china. If one wishes to see how well a backless sideboard, set out with silver, can look against a red wall, there is, in the Metropolitan Museum, in New York, a silver room, whose walls are lined with crimson brocade, to the great advantage of the silver. Pewter looks equally well in a red setting, though it is at its very best with a low toned blue wall.

For a well lighted hall, or for one which depends almost wholly upon artificial light, a red wall is an excellent choice. It has a furnishing quality, especially if the pattern chosen for the paper is fairly large, which commends it for the small hall, as furniture beyond the absolute essentials can be dispensed with, nor are pictures needed, though blacks and whites in narrow black frames, with wide margins will be found to be especially at home on the red wall. Red is such a cheerful color, and so much liked, especially by men, that a red hall is sure to give a pleasant impression to the visitor.

The red wall has the advantage of agreeing with most Oriental rugs and with their derivations in Wilton and Axminster. Another phase of the furnishing quality of red is that it often enables one to dispense entirely with a rug in the dining room, having the floor bare and highly polished. A charming relief to a

Striking Grain and Lustrous Texture

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deep red wall may be had by using curtains of printed linen, the design copying old crewel embroidery on an ecru ground. Such designs often have crimson flowers, which harmonize with the red of the wall.

Tomato Red in the Drawing Room.

In a room with a great many pictures and ornaments, with upholstery in the dull blues and browns and greens, which you see in old tapestries, when no one thing in the room has any very positive color, but the whole is blended into a harmonious whole, like a cashmere shawl, a good background is a tomato red. It goes better with white woodwork than golden brown or old gold, either of which might be recommended, and though no better, perhaps not so good, for a background as gray, is yet much more cheerful. It is particularly charming in a room with a western exposure, in which the sunlight is less brilliant than in a south room.

Turquoise Blue.

The turquoise of decoration is by no means to be confounded with the usual lighter shades of blue. It has absolutely no suggestion of gray, is deeper in tone than the stone, is usually also greener. Its most obvious associate is yellow, a clear, brilliant yellow, and you sometimes find the combination in Italian pottery. Turquoise also combines well with the greenish yellow, called citrine. It is difficult, but not impossible, to find a turquoise wall paper, but once obtained it is an ideal setting for mahogany in its lighter tones, for satinwod, and for marquetry. With much brass and gilt, furniture coverings and curtains of some silk fabric in yellow and ivory, colored mezzo tints, a little porcelain and a rug, either a deep greenish blue, or an Oriental in a very small pattern in brown ivory and blue, one can have a delightful formal parlor, which will be quite unusual as well.

A Blue and Green Scheme.

The combination of turquoise blue and yellow is hardly suitable for any but a formal room, but it is possible to use a turquoise wall for a living room, by choosing furnishings which will be in a subordinate key, so that the blue of the wall will be the high light of the composition.

For this use the woodwork should be dark, a very dark oak, or a weathered green, though the latter will require the use of green furniture as well. There are many charming textiles which combine blue and green, either tapestries or silk damasks, and one of them can be chosen for the covering of the furniture. Then the carpet can be a deep moss green, the curtains sun-proof or changeable taffeta in blue and green. Whatever metal is used in the room should be bronze of greenish tone, and for ornaments a pair of Chinese jars in grayish white with the decoration in dull greens and a little yellow and rose, a single piece of light green celadon and, so placed that it is not near the wall, a distinctive bit of turquoise blue Japanese pottery. The pictures should be prints in black frames, and vivid yellow or orange flowers will be at home in this setting. The turquoise wall will be found far more effective than what is so common in rooms of this type, the wall paper of low toned green.

The Bedroom Out of Nothing at All.

In furnishing a small bedroom out of nothing in particular I would suggest the use of a turquoise wall. With it for a background, the furniture may be white enameled wood with a flowery cretonne for curtains, the patterns being small pink roses and green leaves. Or with the blue wall the furniture can be painted either apple green or yellow, a flowered muslin in green and white or yellow and white being used for curtains and bedhangings. Still another use is with weathered green furniture with copper trimmings.





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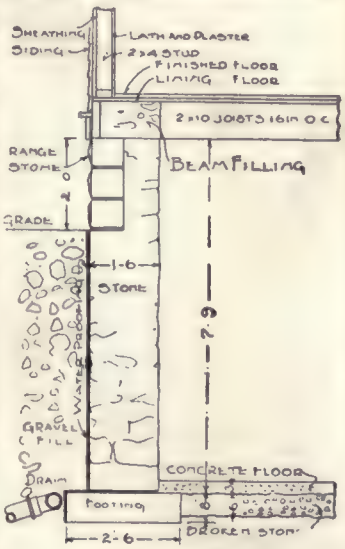
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(Fig 6)

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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Finish for a Flat.

E. L. H.—Being a subscriber of your magazine, I have read each copy thoroughly, but was unable to find just what I wanted so am writing to you.

We are building a six-room flat and are undecided as to what finish would be best for the woodwork. For our den we have fumed oak furniture with brown leather. Dark tan rug and over draperies for windows about the same shade. Brown and tan leather portieres for door between den and living room. We have fumed oak furniture with green leather and green over draperies in the living room, green and tan rug, green portieres between living room and dining room, where we have mahogany furniture, green rug and green over draperies, and for our two bedrooms we have mahogany furniture.

Ans.—We advise a fumed oak stain for den and living room, with white enamel for dining and bedroom. If you do not like the white enamel in dining room you can stain wood trim mahogany, but the white will be the prettier with the green rug and over draperies. With dark woodwork, the room will be sombre. Grey walls would be best in living room, pale tan in den, and in dining room a decorative paper on upper part of wall above a grey wainscot.

Exterior Color Scheme.

B. A. D.: We are building a bungalow 34x42, and would like suggestions for painting the outside. The roof is shingled with red shingles. The three gables are shingled but shingles are not stained. Cobble stones are used for chimney and porch foundations and pillars. What would you think of two shades of green with white trim? There are several evergreen trees close to the house so it is quite shaded in front.

What sort of draperies would you suggest for casement windows in den and dining room, where the woodwork is the natural quarter-sawed oak? Also, for French door in bedroom where woodwork is natural oak?

Ans.—With the copper red roof shingles and cobblestone treatment, we think simply brushing the shingle in gables with linseed oil would be preferable to staining them green. That is, if red cedar shingles have been used. The red cedar takes on a very soft pleasing light brown tone, when oiled. If pine or cypress shingles have been used, then stain a light brown. With a cream white trim we think you will find this a pleasing color scheme.

Some of the Sunfast materials are excellent for draping casement windows in den and dinner room. If the windows swing out; hang draperies inside the frame; if they swing in, a good way is to hang a 10-inch valance from a rod set on *top* of casing with side pieces running from under the valance, set so as to clear the window when opened.

For French door in bedroom, cream net or figured lace, shirred on small brass rods set on the sash of door, top and bottom.

Casement Window.

F. W.: Ever since father sent for all of Keith's books of plans, and subscribed for KEITH'S magazine, I have read with a great deal of interest the answers to the questions on interior decoration; and now I wish to ask if you will help me with suggestions for the walls, rug, hangings and furniture of my bedroom. I think mine will be the front room, with a northwestern exposure, French doors onto sleeping porch, and fireplace, with small window and bookcases below. Now I have always wanted a lavender and white



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bedroom. Could I have lavender in a bedroom with that exposure? I would like casement windows, but father says they are not practicable.

Ans.—I am greatly interested in your letter. First—"Father" is mistaken in the casement windows. Formerly they were unsatisfactory, but the improved fasteners make them entirely practical—in fact, personally, I consider them better than the double hung windows. I have just built two new houses, adorable casements in both. In our hardest storms, not a drop of water enters, but they must be properly set, and the improved fastener used. Some of my casements open out. Those that open out have the screen placed inside, with a little slit at the bottom to allow the adjuster lever or handle coming through. This is worked inside, and you open the window without moving the screen. Now if you have the casements open out, you attach the *shade* to the screen inside. Also, the little thin curtain, or you have a valance of cretonne across the top and on outer sides without any thin curtains.

Lavender and white will not be a good color scheme for your northwest bedroom, but ivory and rose will be delightful. The woodwork must be ivory, and a rose-colored wall. The ivory furniture you refer to will be charming. Your bed must have *cream* spread, not white. The willow chair will be good, so would a dress box at the foot of the bed, covered with the cretonne.

The mantel must be, of course, in the ivory, and facings of deep rose-colored tile. The French door should have cream net shirred on small rods top and bottom

Color of Fireplace Brick.

M. W.—I am building a bungalow. The living room is 23x14½. The walls are to be in French grey with mission woodwork. I am furnishing it with French grey wicker and flowered English cretonne cushions. The fireplace is at the end of the room with French windows on the side opening onto a pergola. Can you give me some ideas of what colored brick to use for the fireplace?

Ans.—We think a Roman brick, in a warm, putty grey, would be the best choice for the fireplace brick. Lay up the brick in nearly white mortar.

Treatment for Floor.

E. L. H.—I wish to thank you for suggestions offered in your recent letter. We have decided to use white enamel for dining room, bedroom, and would ask you to advise as to how we should treat the oak floor or would it be better to use birch floor? What color should it be stained?

Ans.—We should use the same floor in dining room that you have on living room and hall, and treat all the floors the same viz., stain slightly, then fix with filler, wax and polish. The white woodwork in dining room does not require any special treatment of the hardwood floor. Either oak or birch can be used throughout.

Suggestions for Furnishing.

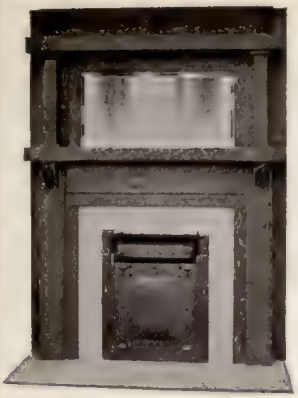
J. T. A.—I am enclosing a diagram of floor plans for our new semi-bungalow home and wish suggestions for interior decoration.

The house faces north giving the living room a south, west, and north exposure and the dining room a north and east exposure. The woodwork in these two rooms will be fumed oak—with built-in buffet in the dining room and built-in book cases in the living room on one side of the fireplace which is of quite rough tapestry brick—almost a deep mulberry in color.

For the living room we have a dull mahogany grand piano, a large overstuffed tapestry chair, a fumed oak davenport, a fumed rocker and also one of brown wicker. We may get a tapestry davenport to match the chair and in that case, would you suggest getting our new furniture to go with the mahogany piano or rather to harmonize with the woodwork? We have a 9x12 Anglo-Persian rug to use in this room—the predominating color being mulberry with soft old blue figures.

The spare bedroom (east) will be papered in yellow and for this room we have an old ivory enamelled set. Would it be better to have the ivory enamelled woodwork in this room rather than pure white? What color drapes would look well with the yellow paper?

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we wish. This room is plastered except for the ceiling. What suggestions have you for the finish of this porch?

I am a very interested reader of your magazine and especially of the department on interior decoration.

Ans. Your diagram shows a splendid living room, with good light for any treatment. The sketch shows you have chosen just the corner for the grand piano. We should not, however, purchase the new furniture in mahogany, but choose pieces in harmony with the fumed oak woodwork and other furniture. It is not necessary these should be heavy. Some of the brown woods with dark antique cane seats and panels are very attractive and in tune with either oak or mahogany. It is also at its best when used with mulberry velvet, and we suggest this material for some of the chairs; as the figured tapestry of davenport and big chair will be enough figured material to use. The sample of mulberry curtain material enclosed is fairly good but rather dark, and we should much prefer a soft greyish tan for the wall paper. Your other ideas are very good. The blue paper sent for dining room panels is very good indeed, and the blue draperies will not be too much blue. The effect will be very pretty to use above the paneling, the soft tan with deep cream ceiling.

Your ideas regarding the west bedroom with grey wall and rosewood furniture, are very good indeed. We see nothing to change in them. Better to finish the doors a dark mahogany stain. There are extremely good grey and blue cretonnes that could be used for side draperies.

The old ivory enameled furniture will be charming on the deep cream stripe of paper you enclose and it would be much better to do the woodwork ivory rather than white. There is a cretonne showing soft pink and yellow roses that would combine well with this paper, and the rug could be tan with dull pink in border.

The sleeping porch would be pleasing with plaster tinted pale green and woodwork painted a shade darker green, white ceiling, white window sash, and floor painted a dark water green.

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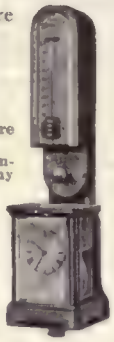
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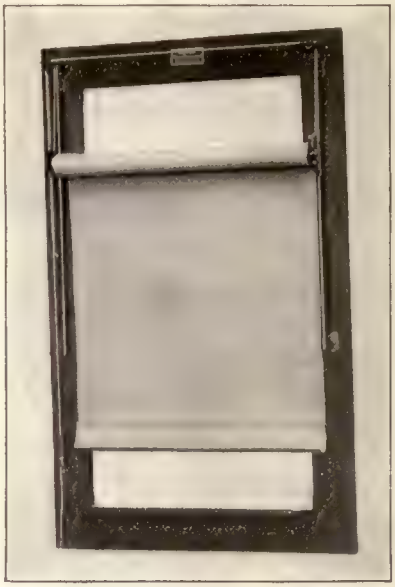
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The shade roller is set on vertical bars.



The shade may be set to cover any part of the window.

impossible to work under such conditions. Pull down the shade and it rattles against the open window in a most disconcerting way, and spoils the shade as well as irritates the nerves. Draw the shade to cut off all of the sunshine from the desk and the light is insufficient. Verily it is a vexed question. Two shades may be installed, one pulling up and the other down, but even this is not a very satisfactory solution. One does not care for the shade roller on the window sill nor for the duplication of cords, even if the

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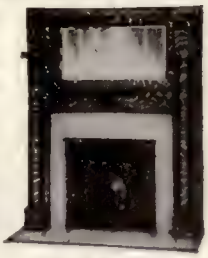
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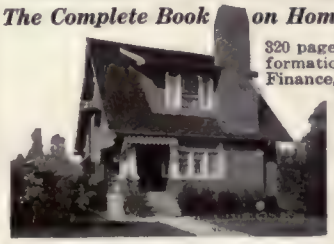
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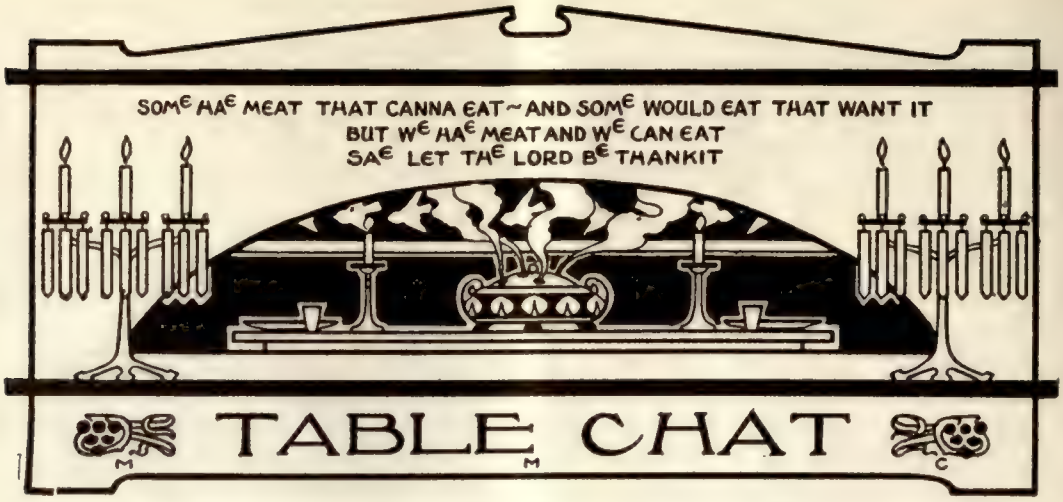
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The Thanksgiving Table

IT is a pleasant arrangement of Providence that chrysanthemums are still in bloom at Thanksgiving time. The hothouse flowers persist still longer, but unless the season is specially inclement it is still possible to find flowers growing out of doors, and these the best of all, the small and old-fashioned button chrysanthemums, in white and clear yellow, rusty red and tawny brown. I have a great fancy for these last. Put a mass of them in a tall glass, with some of the rusty red ones and a very few white ones and heap grapes and rosy apples and russet pears around its foot, and you have a delightfully autumnal table decoration, carrying out all the finer spiritual significances of the day.

The Thanksgiving Supper.

One of our illustrations shows the table set for the first course, with a much more



Set for a Thanksgiving supper after the football game.

commonplace arrangement of hot-house chrysanthemums, white and yellow, in a silver dish, and the meal suggested is not dinner, but the substantial supper which in these football days is so apt to take the place of the midday dinner. The setting is for a very simple meal, oyster bouillon, cold roast chicken with potato chips and salad, rolls and a caramel pudding, just an ordinary evening meal after an early dinner. I will suggest some more elaborate menus, hoping that they will meet the needs of some readers. When the Thanksgiving dinner must take such a secondary place, it is a good plan to have it on the succeeding Sunday, when there is abundant leisure to enjoy it, and when it may be easier to gather the family together.

Oysters on the half shell
Brownbread Sandwiches
Celery

Panned Chicken
Lettuce Salad Rolls
Individual Squash Pies
Cheese Coffee

Hors d'oeuvre

Chicken Pie Rolls Olives

Vegetable Salad
Cheese Wafers

Baked Apples, with Cream
Cake Coffee

Cold Boiled Ham, Sliced
Devilled Eggs Muffins

Chicken Salad
Bread-and-butter Sandwiches

Welsh Rarebit

It will be noticed that there is only one hot dish in any of these menus, which makes their service very easy in the absence of a maid. This single hot dish can be brought in from the kitchen at the beginning of the meal and kept hot, while the other elements of the feast can be arranged upon the sideboard and in the pantry.

The panned chicken of the first menu is a common dish in foreign restaurants and is very simply cooked. A good sized fowl is cleaned and cut into convenient pieces, which are lightly peppered and salted and arranged in a casserole, or a deep earthen dish. Half a teacup of hot water or stock is added, the dish closely covered and set into a moderate oven. The time required varies with the age of the fowl, but two hours will usually suffice to make it very tender, and the flavor is admirably retained. It can be done the day before, left covered and reheated. The giblets are not used and can be saved for an entrée the next day, pieced out, if need be, with some calves' liver.

For the individual squash pies, paté cases from a confectioner's can be used. Prepare a can of squash in the usual way, using only the yolks of eggs. Steam it in a buttered dish until it is set, and when it is cold fill the cases with it. Make a méringue from the beaten whites of the eggs used for the filling, heap on the cases and brown in the oven. Use Roquefort or Neuchatel cheese, with water thin crackers.

Radishes, olives, stalks of celery filled with a highly flavored cheese paste, tiny anchovy sandwiches, are all liked and can be arranged in some sort of a sectional dish, or else on matching plates on a tray. The vegetable salad of the second menu can be made from a can of mixed vegetables, or of boiled string beans, sliced tomatoes and sweet peppers, sprinkled with finely chopped water cress and capers, the whole arranged on a bed of lettuce leaves. For a supper, I think a mayonnaise is preferable to the French dressing commonly in use for vegetable salads. The cheese wafers are thin crackers spread with a paste of grated, *sharp* cheese and butter, set in the oven for a few minutes to harden. A good cake to serve with the baked apples, which should be cored but not peeled, is a really good gingerbread with a liberal addition of fruit, raisins and candied peel.

For the third menu, I suggest buying English muffins and, if there is an open fire in the dining room, toasting them then and there. If they must be toasted in the kitchen, serve them very hot in a covered dish. They must be split before toasting and buttered immediately and liberally. Boil eggs for devilling at least fifteen minutes. At the end of that time the

yolk is absolutely dry and can be rubbed to a paste with ease. Everyone who can make a Walsh rarebit has a pet rule, so I am not going to give any directions for that delectable dish, which is far more digestible than the timid suppose. But I will suggest that it should be made on the table in a chafing dish and that the crust of the bread for the toast should be cut off. Also that the test of a good cheese for the purpose is whether it will crumble between the fingers. Personally I am of the opinion that beer or ale is not essential, but that just as good results can be had with the use of a small quantity of milk. Many rarebits are flat and tasteless from the lack of salt, and many more would be improved by a judicious addition of butter.

Reducing the Meat Bill.

A great many of us have, in these strenuous times, to practice constant economy. Winter is not just the time in which to advocate vegetarianism, which, with many merits to its credit, is apt to result in a deficiency of animal heat. But I think we might eat a larger amount of vegetable and farinaceous food in the cold months than we do, to the advantage of both health and purse. Take that very commonplace article, a beef stew. I would suggest a process of multiplication. Use to the usual quantity of meat, twice the usual quantity of water, twice the quantity of vegetables, cook it twice as long and at half the usual temperature, and see how good it is, always provided that you know how to make it in the first instance. Suppose you are cooking pork chops or sausages, drain them out carefully and, in the drippings, fry apples, potatoes, sweet potatoes, or mashed parsnips. Substitute a dish of cheese and macaroni, two or three times a week, for the everlasting boiled potatoes. Let a bean, bean and tomato, lentil, or split pea soup appear from time to time. Do not feel that you must forego salads because it is cold weather, but use dried Lima beans, canned string beans, shaved cabbage or beets for them. If the oil seems a heavy item, explore the Italian quarter, where you will get the second pressing, the rough oil which the peasants use, which is both good and cheap. Try to have desserts which are at once palatable and of substantial nutritive value, such as boiled fruit and suet puddings, custards and puddings with some sort of a cereal basis.

A Practical Investment.

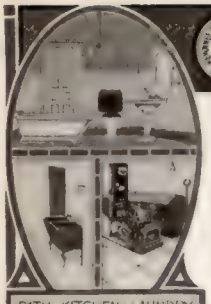
Some poultry is expensive and goes a very little way, but a large fowl costs no more than roast beef and can be made very palatable. Get one weighing six pounds or more, and dress and stuff it as if you were going to roast it. Cook it at the slowest possible simmer, in plenty of water, until you can penetrate the flesh easily with a fork. Then rub it well with butter, dredge flour over it and brown it



Croquets of turkey dressing served with lettuce.

well in the oven, basting it from time to time with some of the pot liquor. Use more of the liquor to make the gravy and add to it the giblets, which should have been boiled at the same time as the fowl and taken out when done. The dressing should be rather more highly seasoned and have more butter in it than when a fowl is cooked in the ordinary way, but the flavor of the bird is much better than that of a small roasting chicken and there is much more meat on it in proportion.

Where a cold Sunday dinner is the rule, the fowl can be cooked on Saturday and sliced to be eaten cold, and a gravy made to be eaten with hot vegetables. Then the remainder of the liquor will supply an excellent soup and there will probably be enough of the meat left to make either a stew with dumplings or a pie. At the very least there will be enough of the odds and ends for croquettes, or for chicken turnovers, which can be supplemented with a liberal dish of spaghetti with cheese, for a dinner later in the week.



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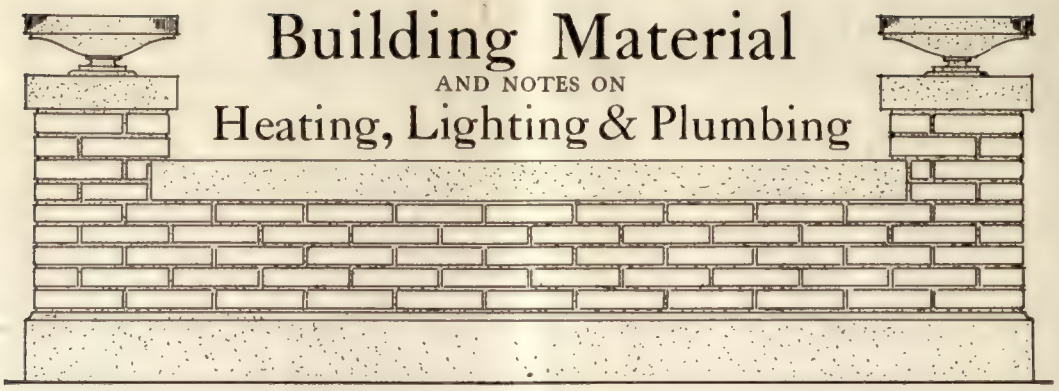
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Paint and Painting

John Upton

PAINT is an absolute necessity for property owners who wish to save money. It is far better to use it liberally and often than to be stingy with it. Unprotected woodwork rots, but wood that is kept well painted will last a century or more.

While paint does, of course, serve to improve the appearance of your property it is far more useful for protection than for ornament. The small amount of money and work expended in keeping your buildings well painted will add greatly to their life. The periodical investment in paints is judicious economy, because it actually costs less to use good paint than to do without it.

Wood is porous, and while the tree is growing these pores are filled with sap. As the sap dries out the pores are left empty. The perfect paint takes advantage of these pores and penetrates them while in liquid form, making when dry a tough coating on the outside anchored into the wood by numerous little tentacles which are as much a part of the outside film as the clinched nail is a part of the head which remains on the surface of the wood. To secure this hook-like hole in the wood, the paint may contain linseed oil and white lead. If some cheaper oil is used it will penetrate the pores just the same as water would do, but having no affinity for the pigment, it leaves much of the pigment on the outside or where it will scale off. Pure linseed oil mingles with the white lead in so intimate a union that it penetrates the wood pores as an inseparable compound. When the paint dries we do not have the oil on the inside, and the paint on the outside, but a new substance both inside and out which can scarcely be separated from the wood.

Do not think, however, that the best paint consists entirely of white lead and linseed oil, or that no other ingredients are necessary, for such is not the case.

A paint is a mixture of a pigment with what is called vehicle. The pigment is a fine solid material, sometimes called the base of the paint. The vehicle is the liquid portion of the paint. There may be also inert filler, solvent, drier and color.

Base.

The materials most commonly used for the base are white lead, red lead, zinc white, and oxide of iron. White lead is by far the most widely used and ranks first for all round purposes. It has great body, spreads well, and possesses wonderful durability. Sometimes it will turn yellow when used for interior work where not exposed to sufficient light.

Because it is comparatively expensive, there is a tendency to adulterate white lead with cheaper materials, as chalk, sulphates of lead, baryta, etc. Red lead (red oxide) is used chiefly for the base of some red paints. In ordinary situations it is quite durable, dries well, spreads well, and is much cheaper than white lead.

Zinc white, or oxide of zinc, is an excellent base for paint. Some authorities con-

sider it better than white lead. It forms a denser coating than white lead and resists the action of the weather better. On the other hand, it is more expensive, more difficult to apply, dries slower, and has not the covering qualities of white lead. Pure white lead has been the standard of paint excellence and is likely to remain such, because no other pigment has natural affinity for linseed oil. The close union between the oil and pigment is required, or a bad job of painting results. Pure white lead is the only pigment having a perfect affinity for linseed oil.

Filler.

An inert filler is a material used to dilute rather than to adulterate the base of the paint; to extend it; to increase its durability; and to lessen its cost. Of course the use of the filler may be carried to extremes. Too much may be used so that instead of being a benefit it will prove an injury. The most common fillers are byrta silica, calcium carbonate, whiting, gypsum and charcoal.

It is very doubtful if pure white lead alone is the best paint. There is no white paint as durable as the darker colors, but as the bulk of the house paints now used are made by tinting a white base, the durability of the white base determines the durability of most paints.

Vehicle.

The vehicle of the paint is the material used to dissolve and hold the base in suspension. The vehicle assists in spreading the paint, enters the pores of the wood, carrying the base and pigment with it; then hardens to form the impervious, protective coating.

The best vehicle is linseed oil, and it is most commonly used in good work. Here again, we have the same thing to contend with as in white lead, because linseed oil is comparatively expensive, it is very frequently adulterated. Linseed oil dries better than any other oil, has a heavy body, and hence resists weather. It improves with age, so if you are using much paint, do not hesitate to buy oil by the barrel. Fish oil, resin oil, poppy oil and nut oils will behave in a manner similar to the linseed, and are called drying oils. They are often used to adulterate, and while sometimes permitted on a cheap job, they are not suitable for fine work.



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Solvent.

The most commonly used solvent is turpentine, which is not as often adulterated as the other ingredients. It is used largely to thin paints, so it can be spread more evenly. Because of rapid evaporation it is not noticed in the dry film.

Dryers.

Certain substances hasten drying. Boiled oil will dry more rapidly than raw oil. Instead of using it, however, dryers are generally used. Among the dryers are litharge, zinc sulphate, manganese, and red lead. While dryers are necessary in many cases, the amount used should be small. Film produced by the use of such is not as durable as that formed by the oil.

There are long lists of coloring materials of which the mineral pigments are the best and most durable. Yellow ochre is the most extensively used coloring pigment, and is very durable. Do not buy mineral paints dry but have them ground in oil.

While there is some difference of opinion as to the amount of white lead or other base which should be used in a paint, it is generally considered that the greater the amount used the more resistant the paint film is, provided all the particles are thoroughly covered with the oil.

Do not use any paints containing compound of lead about your stables or outbuildings where fumes from decaying organic matter will darken lead paints.

Remember that turpentine and benzine are very inflammable and should be kept away from light and fire. Many of the pigments are poisonous. The workman should remove all paint stains from the skin and neither should he eat in the same clothes in which he has been painting.

For Cracks in Old Woodwork.

Another use has been found for old newspapers. They may be made into a pulp or paste which serves as a cheap and effective substitute for putty, to stop the cracks in floors and other woodwork. It is made by soaking newspapers in a paste made by boiling a pound of flour in three quarts of water until the whole mass becomes a thick pulp and then adding a teaspoonful of alum. This mixture should be about the consistency of putty, and should be forced into the cracks with a blunt knife. It will harden as it dries, and then may be painted or stained to match the boards. If the cracks are neatly stopped, they will, after painting, be barely perceptible.

Sediment in Linseed Oil.

The following suggestion is made to the painter. Possibly it may be useful to those who use linseed oil in smaller quantities. We are told by the same authority, John Dewar, that linseed oil and turpentine are largely adulterated, principally with mineral oil and spirits.

"Don't forget when tapping a barrel of 'Pure Linseed Oil,' to draw a quantity of it into a clear white bottle and permit it to stand without handling for a day or two. If an unusual sediment settles return it at once. The sediment is largely 'foots' and will ruin your paint."

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Lay-out for Grounds.

F. E.—Please give me your ideas of laying out my property and let me know what level you would use as a base line for the house, so I will know where to put my cellar; also your ideas as to location of house and sidewalks. My lot is on a corner, and the house will face west, on Harrison street. I expect to place it from 40 to 50 feet from both streets. I once was told by a landscape gardener to so place a house as to get the prettiest effect from your yard.

You will note that Harrison street is from four to six feet below grade. I want my gates to be on the street at the south side, one near each corner, and also a gate on the alley side directly out from my back porch walk. I would like to have a concrete bulkhead on Harrison street about two or three feet high, the top of which would, of course, be parallel with the sidewalk, and then pile the extra dirt in the northwest corner of the lots, which would thus make the ground quite level north and south, and perhaps have a gentle slope from the house to the west line, and of course quite a nice round terrace at the bulkhead.

Ans.—Your lot is not an easy one on which to build, on account of the street grades to the south. The foundation must be placed so that water will not run into the basement from the southeast corner, but otherwise must be as low as possible on account of the fill involved on other sides. The location designated is a good one, and the grade of the front part of the house will be much higher than street grade at the southwest corner of the lot and lower than the southeast corner. You will, of course, make a little valley between the house and the southeast corner, and grade the rest of the lot in large, sweeping convex curves starting with the house and stopping with the property line. Because of the irregularity, it is essential to grade so that the lines are natural like a hill rather than artificial like a terrace. For this reason the change in grade at the foundation from front to back should be inconspicuous and rounding and not at all like a formal terrace.

The sidewalk lines should likewise conform with the naturalness of the grade lines. The front walk would best be something like an "S," starting straight in front of the entrance steps and terminating in some steps coming up the southwest corner of the property. They would properly be five feet wide. The back walk being only a service walk, can as well be narrow and come in straight to the back steps at right angles to the street.

To complete such a careful arrangement as you evidently intend to make, some considerable tree and shrubbery planting is needed about the house and near the property lines in the same natural manner as the other lines of the lay-out. The planting plans published recently in this magazine will show the general method.



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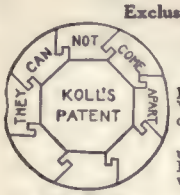
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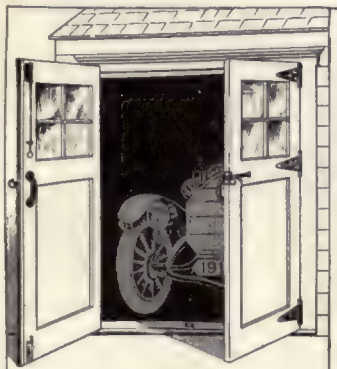
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Pergola Album—"G28"—illustrates Pergolas, Garages, Lattice Fences, Veranda Treatments and Garden Accessories will be sent for 10c in stamps.

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WOODS AND HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

An Educational Propaganda.

THE Forest Products Federation have organized a new department of trade extension, which will undertake an educational propaganda on the use of wood, the field which it should fill to the greatest economic advantage to all those concerned, and the status of wood under the pressure of modern competition and selling methods. Education in the broadest sense is the keynote, and by no interpretation is simply a national advertising campaign proposed.

The initial lines of work will cover building codes and ordinances relating to the use of wood in building and its limitations.

Investigation as to the relation of wood construction and shingle roofs to the fire hazard will be conducted and publicity given to the findings. Fire retardant materials and processes will also be investigated. This important work will be undertaken in the spirit of safeguarding public welfare and protecting human lives and property.

The engineering bulletins will be planned so as to be embodied in a Manual of Standard Wood Construction.

Publicity on the uses and advantages of wood will be given by literature, magazine articles, lectures and all other available mediums.

Popular leaflets will be prepared for distribution through many channels, covering specifications and suggestions for many farm structures.

Wood preservation and its application to the lumber industry will be exploited and literature prepared on the subject.

Co-operation with several organizations such as the National Paint Association, United Brotherhood of Carpenters and Joiners, American Wood Preservers' Association, will be arranged to the end of promoting mutual interests in the use of wood.

The Increasing Uses of a Very Old Wood.

The expositions of California are bringing to the attention of the people of the country the qualifications to which California redwood lays claim and which, they say, have been little known outside of the Pacific coast territory. Redwood has been used largely for general building purposes, on account of its great durability and light weight, and for mill work because of its comparative freedom from swelling and shrinking with atmospheric changes. Its possibilities as an interior finish have not been developed. The California Redwood Association predicts that, with the recent completion of direct rail connection, this lumber will soon become one of the most important of building woods.

The following statements have been made concerning its use in early California building:

"The imperviousness of redwood to decay has long been known, and therefore its use by the home builder for foundations is not only natural but advantageous.



Winter Comfort is Insured

by the use of

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We make them in six sizes suitable for any house. We make them with regular pipes and registers, and we make them **"pipeless"** with one big register face for warm and cold air. We can suit any requirements, save you money and keep you warm. We plan the entire arrangement and give a binding guarantee of satisfaction or no pay.

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Our monthly payment plan of selling direct saves you the dealer's profits and charges for installation. The

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with the patented **"Down Draft System"** is best for residences, schools, hotels, churches, etc., because it delivers plenty of heat wherever and whenever desired at a saving of one-third to one-half in fuel bills. Install the **Jahant** yourself. We send complete outfit, freight prepaid with special plans, detailed instructions and all necessary tools for installation. Satisfaction guaranteed or money refunded.

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Pumps and systems for small residences, country homes and estates, summer cottages, greenhouses, etc.

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Keep the American Dollar at Home.

Homes in Humboldt and Mendocino counties were built on redwood foundations as long as fifty years ago, and the original sills are at the present day as sound as when first laid down.

The weather resisting qualities of redwood, even when unpainted, are proverbial. Barns erected in Humboldt and Mendocino counties as early as 1855 were sided with unpainted redwood boards and covered with redwood shingles and shakes, none of which today show the slightest deterioration from exposure. The Russian church, erected at Fort Ross, California, in 1811, was built entirely of hewn redwood, and although the building itself was completely wrecked by the earthquake in 1906, the redwood itself is as sound today as when the trees from which it was hewn were felled.

The fire resisting qualities of redwood are well known, and no forest fire, no matter how severe, has ever destroyed a redwood forest or killed a sound mature redwood tree. In the great San Francisco fire of 1906, this characteristic was put to a most severe test.

The *Sequoia Sempervirens,* as the red wood is technically called, is found only along the fog belt of the California coast, extending in a strip from ten to thirty-five miles wide from the Oregon line on the north down into Marin county, with a few scattered groves of small commercial importance as far south as Monterey."

Trees Oldest Living Things in World.

Recently the government has issued a bulletin on the giant trees of the Sequoia national park of California. There are 1,166,000 of these great trees, the oldest of which is 3,200 years of age, the tallest 292 feet high, the greatest diameter 36.5 feet. The greatest diameter 100 feet above the ground, 17.7 feet. These trees are the oldest living things in the world.

In the days of the Trojan war and the exodus of the Hebrews from Egypt, the oldest of the giant sequoias was a sapling twenty to thirty feet in height, and by the time of the Marathon was mature.

The redwood tree grows to a height of 150 to 300 feet with a diameter from three to fifteen and even twenty feet at the base. The trees grow very close together and will average from 75,000 to 100,000 board feet to the acre. The record yield per acre is 1,000,000 board feet.

Eucalyptus, the Wonder Tree.

California growers of the eucalyptus tree met in convention in the Lumbermen's building at the Panama-Pacific exposition. The tourist-visitor to California is surprised at the number and extent of the young eucalyptus groves which he sees on every side along the ways of travel. They call the eucalyptus the "wonder tree" because, as they say, it grows ten times as fast as hickory, oak or mahogany and yields lumber which is harder and better than those native trees.

Oregon Timbers.

The great industry of the state of Oregon is displayed in a unique way at the San Francisco exposition by the State building. It seems to be composed entirely of mammoth tree trunks. The wide porticoes that surround the building are supported by forty-eight majestic columns representing the forty-eight states of the Union. These columns are simply mammoth trunks of the Douglas fir, with the bark left on, from the forests of Oregon. They are from four and one-half to eight feet in diameter.

Each of these columns contains enough lumber to build a good-sized dwelling house; they weigh from forty thousand to fifty thousand pounds.

The flagpole for the building is the tallest in the world—251 feet high. It was hewn from a tree 347 feet high, and weighs 93,600 pounds. There are more than thirty thousand feet of lumber—enough to frame and board in five eight-room houses—in this giant flagpole. The tree was more than three hundred years old, and it cost over five thousand dollars to transport it and set it in place.

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The special feature of this magazine is a complete plan 24x36 inches, drawn to scale. This may be a house, bungalow, barn, two-flat building or double house. They are the same as an architect's blueprint and show front, side, rear elevations, floor plans and details with complete bill of materials.

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Living and Dining Rooms—Dutch Brown, flat or glossy finish.

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Secure a set of Finish Birch Panels before making final decision. Sent on receipt of 10 cents to cover mailing cost.

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SPLINTERS AND SHAVINGS

Seven Lean Years.



HE dream of Pharaoh which Joseph interpreted pictured seven fat years following seven lean ones. It is a curious enough fact, but modern statistics show, we are told, that the business tide ebbs and flows in approximately seven-year periods. Since 1907 the tide has been on the ebb, according to this statement and today there can be little question but that the tide has turned.

For the first half of the year 1915 a foreign trade balance of stupendous figures has been amassed and is still increasing. This trade balance has been built up not alone from the necessities of war but also by the needs of the home.

The principal factor contributing to this result, we are told, was not munitions of war, which might seem to give us a responsibility in this terrible slaughter, so much as foodstuffs, the exportation of which for eleven months amounted to nearly three-quarters of a billion of dollars. Of this, wheat constituted the largest item of increase over the previous twelve months, followed by flour, beef and other meats.

In this country the demand for labor and for the product of labor is becoming stronger, while capital created by economy is awaiting the inevitable demand for its legitimate use. Prosperity seems to beckon from the distant horizon.

Our Trade Balance.

"We all bow down before, and bump the head hard three times in the presence of, that mighty and mysterious fetish, The Trade Balance. Whether we discuss industry, commerce, finance or the tariff in a nation-wide sense, we do not overlook the masterful relation of The Trade Balance thereto, nor forget to beseech his statistical favor in order to give point and emphasis to argument. It is true some economists have jeered at The Trade Balance and called him a Stuffed Prophet.

"So we ought to be very happy over here on this side of the Atlantic. We have assured ourselves time and again of the potency and goodness of The Trade Balance. And now that we have it, in amount to exceed all the dreams of avarice, what are we going to do with it?

"The inner economic meaning of this windfall of war we are not able to establish at this time. The United States as a whole is a great deal richer in both money and credit than it was a year ago.

"We are saving a good deal of money in our relations with Europe on other than trade scores, notably in the expenses of travelers and tourists—the latter of whom are princely spenders."

Beauty as an Economic Asset.

"We are coming into a fuller and clearer realization of beauty as an economic asset," the Minnesota State Art Commission tells us. "The industrial arts of France or the handicrafts as we have come to think of them, exceeded in their economic value in one year the total valuation of the American wheat crop."

The Annual Cost of a Rat.

A single rat, the experts say, may eat or otherwise destroy from 60 cents' worth to $2 worth of goods per year. Rats with social aspirations, who live exclusively in hotels, have been known to eat $5 worth and more per year. Rather less, on the whole, than the average human guest at these establishments, yet totaling up to about $50,000,000 a year cost to these United States for the maintenance of the rat population says the Philadelphia Public Ledger. Rats cost Philadelphia something more than $1,000,000 a year.

The cost of his living is one of the least of his misdemeanors. In southern ports where the bubonic plague is to be feared a strong quarantine is exercised against the rat. New Orleans is making heroic efforts to make the city and especially the wharves rat-proof. This again is a costly proposition, which can hardly be figured in his hotel bill.

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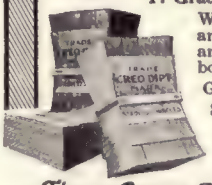


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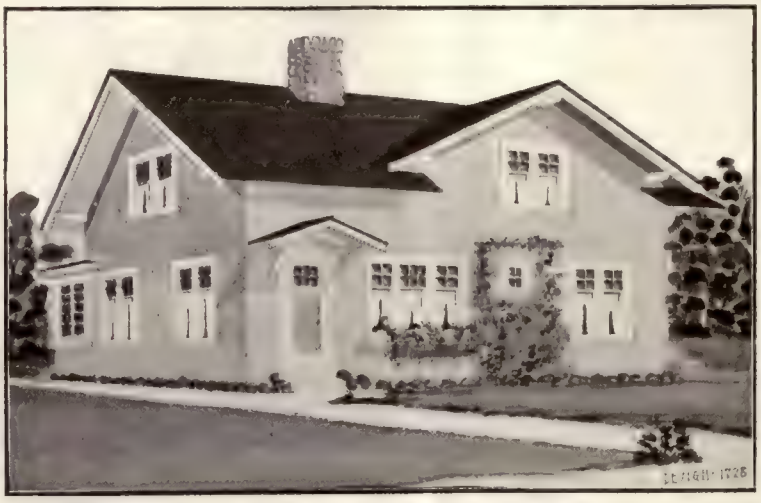
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Cottage Design No. 1610 from KEITH'S Magazine.

828 McKnight Bldg., Minneapolis, Minn.

New Booklets and Trade Notes

THE White Pine Series of Architectural Monographs is a most unusual publication of its kind. It is a "bi-monthly publication suggesting the architectural uses of white pine and its availability today as a structural wood," issued by the White Pine Bureau, St. Paul, Minn. The second number has just been issued, and illustrates the development of Colonial building in New England during the early portion of the 18th century, showing many fine old houses from Medford, Marblehead, Cambridge, etc. The text is prepared by Frank Chouteau Brown, whose name alone stands for something of interest concerning Colonial work.

The first number described the very beginning of domestic architecture in this country. The third issue will discuss the domestic architecture which was developed by the Dutch in their colony of New Netherlands. Mr. Aymar Embury II will contribute the text.

These houses, which have stood much more than the length of time which people of other sections of the country consider the normal life of a wooden structure, are many of them still in an excellent state of preservation, and are fine old houses. A further and more detailed knowledge of them will be not only of interest, but very helpful to the builders of the present time.

* * *

A little book on "American Plaster Board,—The Modern Lathing," purposes to inform architects, contractors, building material dealers, and people expecting to build homes or other buildings of the merits, value and proper uses of this plaster board. It separates itself entirely from other so-called plaster boards, because it does not take the place of plaster, but makes a base for the plaster which does not shrink, warp, nor discolor the plaster, and which is at the same time vermin proof, sound proof, water proof, a non-conductor of heat, and comparatively fire-proof or at least non-inflammable. It may be used for floors and ceilings as well as for walls, and is especially valuable as deadening the sound as well as fire retardant. It is manufactured by the American Cement Plaster Company at Lawrence, Kansas.

* * *

The first copy of "Construction," the official organ of Society Advocating Fire Elimination, with a department devoted to S. A. F. E. homes, has been issued. It will discuss in detail the consistent planning and building of all structures where the consistent use of fire-proof materials and protective devices will prove of direct value to owner, architect and builder. People have allowed themselves to feel that insurance protects against fire.

Modern Conservation is endeavoring to put each material to the use for which it is intrinsically best adapted. The misuse of all kinds of materials has been widespread, and is not really an advantage to the material as it tends to bring it into a disrepute. Safe construction should be an axiomatic principle, and safety in home building is most desired.

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KEITH'S MAGAZINE ON HOME BUILDING



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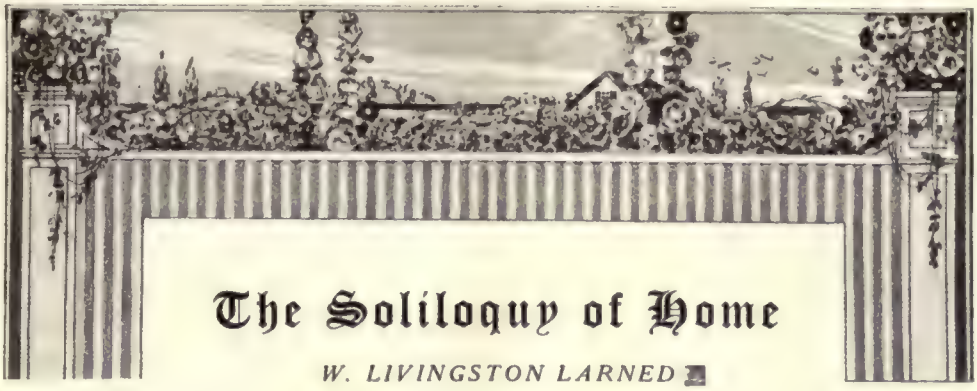
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"Within my portals."

KEITH'S MAGAZINE

VOL. XXXIV DECEMBER, 1915 No. 6



The Soliloquy of Home

W. LIVINGSTON LARNED

THE last nail has been driven. The last brush-mark is dry, and the last remnant of the restless Artisan has been cleared away. I stand, complete, ready for your occupancy. I am no longer mere wood and plaster and brick and metal and craftsmanship. I am HOME, in the sweet fullness of the wonderful word.

It has taken Self-sacrifice to build me. Years have passed, monotonously, perhaps, and the heart has hungered for my peace and quiet, but now . . now . . Man and Woman, your Nest is complete. The blue sky smiles gently above it and here, in all the broad reaches of God's wonderland, is one tiny patch you may call YOUR OWN. It was WORTH the waiting and the heart-aches and the delay. Man . . . light your pipe and don your smoking jacket . . . there is your table and your evening lamp and your dreams. And you, Woman, we would have you sing in your tidy kitchen and plan such magic ideals as never were born short of Paradise.

My snug ramparts will do much to ward off the unhappiness of the big, outer World. Indeed, if you but know it, Man and Woman, I am a WORLD UNTO MYSELF, complete, beautiful, soul-satisfying. And when You, Man, are wearied of the office and the bustling town, and when Business shall have buffeted you beyond endurance, you may turn your eyes MY way, sure of rest and release. Yes . . . I am the antidote for the Hurts of the Commercial Highway. I open my doors to you, who have been rebuffed and beaten and cowed and hammered down to the dust by Life's long struggle for existence. An unassuming



little Convent amidst roses and green lawns, for Woman, sick of Battle with Stern Reality. Here, sure of herself, Mistress of all she surveys, she is privileged to draw the blinds, and close the portals, bolting herself in from that which humiliated. A Princess, mayhap, in a Castle of Content. From the battlements, she shall peer outward, upon the panorama of the nervous Day, and see it pass, touching her not . . . leaving her happily wedded to her lullabies.

Yes, I represent one of the purest and most Holy ideals Man or Woman may hide in their heart of hearts. "HOME" . . . the word itself was first whispered in Heaven, and then sent wond'rously echoing by the angels. Love dwells within my walls . . . God, Himself, smiles in at the sunny casement, and mixed with Hopes and Ambitions and spiritual dreams is the laughter of little children. I am incomplete without CHILDHOOD. The rooms seem lonely indeed, for all their life if babies be not there, to coo and to cry and to crawl joyously along the golden path of the sun as it shines there on the sitting room floor. A chalice 'O Maternal Affection am I, smothered in jasmine and tea roses.

During those solicitous days when hammers pounded upon me, and the scent of white pine and paint and tar and lime were in the air, you came to the top of the hill, arm in arm, you two, and stood at quite a distance, looking at me, in silence, as if a word might dispel me into Nothingness again. It was difficult to believe that I was being created . . . that, from the Toil and the Waiting, Material Reward had sprung and was taking pretty shape. And the days passed . . . the grass flung its green fabric over the scarred earth, the clambering vines grew strong and luxuriant . . . the roses SHE had planted took firm root and buds came with Spring-tide . . . a magic mosaic of Beauty welded together by June.

Come, bide with me. As birds build nests in high trees and raise their young, you two, Man and Wife, are to climb the long hill and plan for a new sort of future—a future in which little hands and little lips and little voices are destined to play wise part. I'm waiting for

you. As sweet and as clean as the very flowers at my door. No unkind word has been said within my portals—no sufferings have been known . . . not so much as a tear has fallen on my sparkling threshold. Take me and see well to it that I be kept still sacred. Sweethearts must lodge here . . . sweethearts until the twilight of your companionship . . . my rooms long for those honied, inconsequential, bird-like things men say to women and women say to men, when their Love is as Holy as the Bond which made it possible.



There is a porch, up whose white columns the honeysuckle clambers, . . . there is an attic, where cob-webs will be spun from dark rafters and where old love letters will some day rest in a horse-hair trunk . . . there are closets, just right for toys . . . there is a cool, long hall and a pretty little dining room, at whose windows dainty white curtains will ripple in the wind and geraniums burn orange and red, as if painted . . . there is a pink and white bed-room, overlooking meadows and hills and dream-things, lying far below in the afternoon sun . . . there is a room set apart for books and leather covers and magazines and consecrated, we confess, to the mystic, oriental fumes of tobacco smoke . . . there is a certain corner . . . yes, a certain quiet, sunlit corner where a crib should stand, with room beside it for a rocking chair and one of those tall, sedate sewing-baskets of cream willow. There is a cellar-way, rife with poetic mystery and shelved for those delicious jams and jellies My-Lady will make—there is . . .

But No . . . I will say no more. Come . . . I am waiting impatiently for you both . . . MY Children . . . my Lodgers of the Long Sacrifice . . . When the last stroke of hammer and brush had been given there remained but ONE more thing to make me truly habitable . . . God's Benediction . . . and last night . . . as the world slept, the dews and the summer rains fell, singing their way along the roof, and Dawn gave golden assurance that HE had given it.

The Secret

On a bed of moss the violet lies
And o'er the violet sway the ferns:
Above the ferns the birches rise
Above the birches glow far skies
And God o'er all with fond heart yearns.

—*Evelyn M. Watson*

A Real Estate Investment on Two Forty-foot Lots

Nellie Ward Haller

THE question is often asked, what can a woman do for herself when she has only a small capital and no especial business training? What can she do with a small capital in California to make her self-supporting? Here is the story of what one woman did. There were really two women,—a story always requires two people. In this case the daughter soon married, so she does not count in this story.

This clever woman went to California to live in God's sunshine and to enjoy the fruits of the earth and the blessings of health. No one need spend her days in a country that is ice-bound half the year and tradition-bound all the time, when the sunny land of California beckons to her, and offers her a home.

She invested the bit of gold she had brought with her from the cold country in two forty-foot lots on a corner in a new suburb almost an hour by trolley from the heart of the city. It was one of the most beautiful spots imaginable, so the clever woman thought, almost overlooking the Arroyo Secco yet not quite near enough to acquire Arroyo prices, which were very high even then. There was a small house on the lots. She built her home, on the corner, and a small house beside it with the rest of her small hoard.

Her friends gave her good advice; it was too far out; the suburb was too new for good rentals; it was not practicable to build so good a house; how could she



The "Big House."

ever dare to build the second house. But the clever woman kept the even tenor of her way. She rented the big house easily. Then for a time she rented the second house, furnished, and lived elsewhere. She soon furnished all of the houses. Each had its little garden spot both for vegetables and flowers, for the lots were 150 feet deep. House Number One, which she intended for her home, was a Keith design and built about ten years ago; the original cost was about $2,000. It rented immediately for from $25 to $30 a month. It is a seven-room, story-and-a-half bungalow. The four bed rooms upstairs are not large, but each has windows on two sides, a magnificent view as well as light and sunshine, and are very satisfactory. The bath room, 6'x9', is of good size. The living room is all that the words imply and makes up for any deficiency which the rest of the house may have. It is 15x25 feet and well lighted. The dining room is 15x17 feet with a built-in buffet. A semi-circular bay gives a most unusual and attractive stair landing. The kitchen is 10x17 feet. The entire floor space is 26x44 feet. This house is certainly a very pleasant place in which to live. The living rooms connect by generous openings and the floor space is so compact as to make housekeeping easy.

The interior finish is slash grain Oregon pine, stained black; the floors are of the same kind of wood polished; the walls are Alpine plaster "rag finished" and tinted brown with cream-colored ceilings. The exterior of the house is most attractive, with the semi-circular stair bay on one side and the exposed chimney on the other side of the house. Front and back porches six feet wide are under the main roof.



The landing in a semi-circular bay.



The corner fireplace of the little house.

The second house sets to the west of the main house. It is an ordinary five-roomed cottage, with bath and the usual screened porch in the rear, and a pergola over the entrance. This same plan has probably been built hundreds of times in Los Angeles and was very much in demand some years ago when this house was built. There is nothing unusual about the plan or the house. The floor

space is 25x40 feet. The living room is 12x18 feet, the dining room 12 x 15 feet. The interior finish is Oregon pine, and the floors are painted a dark red; the walls are tinted ecru throughout. The house has always rented well, bringing $20 or $25 when it was furnished. It has been built about eleven years, and the original cost was $1,300. The Lady Banksia rose, a climber, on the pergola adds quite a little beauty to the front entrance.



Climbing roses give a touch of beauty.

As a matter of investment, the clever woman found that the third tiny house, facing east, which was really the first one built, had been quite as satisfactory as the others. The depth of the lots allowed a lot 40x80 feet to be taken off beside the alley, leaving the front lots 40x110 feet. The 20-foot alley, clean and well kept as it always has been, was really a narrow street.



"The bird cage."

This house is almost all windows. It has a floor space of 20x44 feet and contains four fairly good sized rooms, a bath room 6x9 feet and a sleeping porch 6 feet wide across the entire back of the house. The peculiar shape of the house and the fancy shingled exterior have caused the people in the neighborhood to dub it "The Bird Cage." It has been built over fourteen years and has only been vacant for a week or so at a time, owing to the energy and foresight of the clever woman. The woodwork throughout is Oregon pine painted white, the floors also Oregon pine painted. The walls are rough plaster tinted ecru, with cream ceilings. The furnishings are golden oak and the draperies at the windows yellow dotted swiss. Asparagus fern, red geraniums, crepe myrtle and roses are banked about the house. The garden has a variety of fruits. The house probably did not cost over $1,000, and has averaged a rental of $20 per month, so as an investment it has paid for itself.

The "estate," viz., the two forty-foot lots, has become a veritable rental proposition with a fair return. The houses facing snow-capped "Old Baldy" are attractive, compact, livable,—particular care has been taken that they should be all of these.

After a few strenuous years this clever woman came into her own again, and made her home in the "big house."

Planning the Fireside Corner

Charles Alma Byers

ALTHOUGH nearly all of our homes of today are equipped with furnaces, so that the house may be evenly heated throughout, the fireside corner, on the winter evening, is without doubt the most popular place in the home. It is here that the family invariably assembles to read and to talk over the events of the day, and it is here also that evening callers are most often entertained. And it is the household resort not only for the evenings of the winter months but of the fall and spring months as well for on such occasions a fire on the hearth will often prove alone sufficient.

Therefore, to make this place suitably inviting, the fireside corner should receive careful consideration.

The fireplace itself should receive first attention. It must be properly designed, so that it may prove of practical service, and it should also be so designed as to constitute an enhancing feature of the interior. The ordinary builder of today, however, is invariably thoroughly familiar with the rules governing practicable fireplace construction, so that this phase of the matter may be passed over without further comment—so long as he is made to realize that these rules are of paramount importance.

To make it suitably decorative, the fireplace should be made to harmonize as much as possible with the general appearance of the room in which it is used. If the room be of simple and dignified character, the fireplace naturally should be in keeping therewith; if the interior lean toward rusticity, this effect should be likewise maintained in the fireplace, and so on. In other words, the feature, in neither design nor color scheme, should be too conspicuous, nor in any way seem to have been added as an afterthought. It is by a proper consideration of these matters of proportion that the truly attractive fireplace is evolved.



Brick and tile give a wide range of color.

To create the desired effect, there are any number of materials from which a selection may be made. Brick and tile are always obtainable in a wide assortment of colors and finishes, and from them it is possible to produce almost any scheme that may be wanted. Artificial stone, or concrete blocks, is also frequently employed with good result, and even cobblestones are sometimes highly satisfactory, if properly handled.

Generally speak-



The brick hearth is the width of the seats.

ing, the fireplace should be of simple lines. This is again an age of architectural simplicity, and rarely will any show of the ornate seem to comprise a display of really good taste. This applies to the construction of the fireplace as a whole, as well as to the mantel or mantel-shelf alone. A fireplace may be pardonably made prominent by massiveness, but rarely, or never, conspicuous by ornamentation.

An inviting fireside corner is, of course,



A copper hood gives a good touch of color.

dependent mainly upon a satisfactory fireplace. There are, however, several other matters that may be considered in connection therewith. For instance, a built-in bookcase or two will often enhance the appearance of the corner, as well as prove delightfully convenient. Sometimes, also, a built-in writing desk is considered a desirable asset. Stationary, or built-in, seats are very frequently, nowadays, made a feature of such a corner, and by referring to the accompanying illustrations it will be realized that they are highly effective in making these cozy corners indeed inviting.

When the fireplace occupies the center of some outside wall, a very common arrangement consists of placing a bookcase at each side of it. Usually the cases are rather low — perhaps extending from the floor to a height of four or five feet—and in this way the tops are made to provide charming shelves for pictures and bric-a-brac, while above will probably be located a tiny window or two. Whether the fireplace be in the living room, den or library, this arrangement is particularly handy, and will be found to add greatly to the appearance of the room. In some cases, however, a small built-in writing desk is substituted for one of the bookcases.

There are several different ways for arranging seats for corners of this kind. These seats may be placed against the wall at either side of the fireplace, being used instead of the bookcases, or, if the room be sufficiently narrow, they may be located along the side walls of this end of the room. This, in fact, since the seats more nearly face the open fire, is an especially desirable arrangement. And sometimes, in such cases, a low bookcase may be built out into the room at the outer end of each of these seats, so as to shut off the fireplace into a sort of alcove. This, too, is a very delightful plan, and the fireside corner of this kind is sure to constitute an ideally cozy retreat. This, of course, is rarely adopted in anything but the living room, since the other rooms are seldom large enough to permit such a division.



The fireside corner is a cozy retreat.

In designing a fireside corner to contain built-in seats, it should be borne in mind that the seats can be made to serve for other purposes than those for which ordinarily created. Beneath the seat-shelf, if this seat-shelf be fastened with hinges, may be provided an excellent fuel bin or a storage place; and sometimes this space is even equipped with drawers,



The round arch of the fireplace opening is unusual.

which may be drawn out from along the front, and hence without interfering with the seat cushions and pillows.

These attractive fireside corners may give suggestions of practical value to the prospective builder.



A simple fireplace and seat.



THE KITCHEN



A Complete Kitchen Without Unusual Expense

Edith M. Jones

(Copyright, 1915, by Edith M. Jones)

THE kind of houses we live in greatly influence our lives. Not alone is our comfort affected but our housing has much to do with our efficiency. A cold, dark house is not only less comfortable than a warm, sunshiny one, but the care of a badly planned house requires a great waste of time and energy.

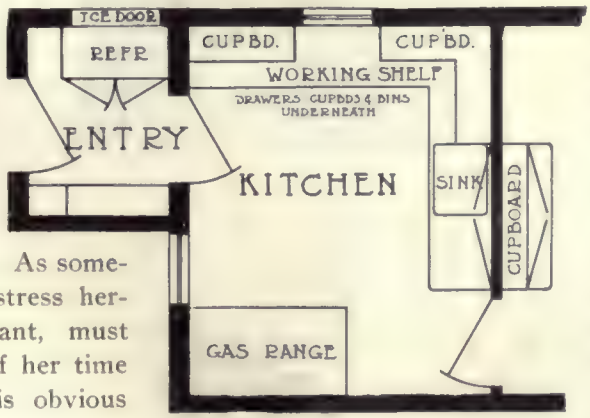
Many otherwise knotty household problems find a solution when housed with ample, well planned closet and storage room, good laundry equipment and drying space, a convenient and well equipped bath room and above all a kitchen which provides well chosen and carefully placed furnishings.

The kitchen is without doubt the most important of all because it is the great industrial center of the house. As someone, either the mistress herself or an assistant, must spend two-thirds of her time in this room—it is obvious this part of the house should be not only convenient but attractive.

It is a great mistake, however, to think that a convenient kitchen means an unnecessary outlay of money. Not so at all,—for some of the most expensively equipped kitchens I have ever seen have been the most inefficient. On the other hand some very simple kitchens have been models of convenience.

A successful kitchen does not demand expensive equipment so much as intelligent, careful planning for the individual family needs.

A mistake in the kitchen is especially serious because changes mean either much additional cost or else there must be many needless steps, useless effort, waste of time and constant annoyance.



A complete small kitchen.

The kitchen floor plan which is shown is one of the very simplest types of the so-called efficient models. It has proven itself a blessing in a

home where the mistress does all her own work, with the exception of the laundry work. This housewife is a woman of many outside interests and constantly says she could never do what she does without her complete little kitchen.

There is not one unusual expense in this kitchen, nor is there one useless step or motion.

This kitchen is small — the inside measurements are 8 feet by 10. The small entry is 4 by 5 feet. This entry in this northern climate is not alone a great protection from the cold and snow but it keeps much dirt out of the workshop and altogether is quite worth the added expense.

In so small a kitchen it saves much wall space to install the refrigerator, as we did this one, in this entry. The icing is done from the outside and the box is provided with drainage. To avoid the stooping process involved each time one goes to the food chambers the box was set one and one-half feet from the floor. This space was made into a cupboard and is used for the scrub pail, etc. This elevated refrigerator solves the same problem that the modern gas range has done in its right and left hand ovens. Women hate stooping and it is one of the things to be avoided as far as possible.



The pan closet.

A small receiving window with automatic locks, not shown in this drawing, opens on an inside shelf beside the rear door. This window is used to receive the deliveries and saves many unnecessary trips to answer the door bell.

To the left of the entry door is the broom closet in which a place is provided for two table boards. As they are rarely used the remaining boards are sent to the attic.

The remaining space at left of entry is used for the pan closet. The illustration makes its use and convenience quite apparent and a description unnecessary.

The gas range shown is small in size but one that is very satisfactory for a small family. It has a right hand oven, white enamel splasher back and white door panels.

The window beside the gas range serves for direct light on the range work and also provides the counter ventilation. Beneath the window is a drop shelf which can be used when occasion demands.

The working shelf at the other side of the room is thirty-six inches from the floor. It is made of inch strips of white maple 1¾ inches thick, bolted together, so that the bolts can be tightened. This has proved a most satisfactory working shelf. Beneath the shelf are the *movable metal lined* flour and sugar bins, bread and cake drawers and a storage cupboard.

The one piece porcelain sink is the same height as the working shelf and continues from the end of working shelf to a few inches of dining room swing door. This door, by the way, is provided with one of the new and very useful door stops. The sink has a drain stopper which is a great convenience in washing dishes and preparing vegetables. A drawer with partitions for working knives, spoons, etc., is under the left drain board. Under this drawer is the low radiator. Under the right hand drain board is a chest of drawers for the roller and tea towels, the silver cleaning outfit, etc.

The cupboard above the working shelf at the extreme left is for the spices, etc. The other cupboards in kitchen are for the dishes. The doors of all these cupboards are of glass but the overhead cupboards have wooden doors as these are only used for storage.

The doors above the sink open into a cupboard above the buffet in the dining room. The utility of this arrangement cannot be questioned. The used dishes from dining room table are put in the cupboard from dining room side and are taken from kitchen side and washed. After draining and drying they are placed in the cupboard again ready for the next meal.

This simple arrangement not alone saves much handling but also much breakage of dishes. The doors must be carefully fitted, however, and care used in keeping them closed during the cooking of the meals in order to prevent odors from penetrating into house.



A range extension with table of maple strips bolted together.

This little kitchen is not alone a very efficient kitchen but a most attractive one in appearance. The floor is covered with linoleum in a Copenhagen blue and cream and has a coved base. This coved base fits up under the bins also and does away with all angles and corners. The side walls are covered with a creamy-white Sanitas which has a conventional design in Copenhagen blue with a touch of deep red.

The woodwork of the kitchen is enamel the color of Jersey cream. The entry is done in the natural color to match the outside finish of the refrigerator.

The windows have thin white sash curtains. Above the curtain rod on the windows is a little shelf and here are always seen one or more red geraniums.

Some way this last little bit of color seems to be the crowning touch to this attractive room.

If it is true that the houses we live in greatly influence our lives—can we not as truly say a well planned attractive workshop, like the one described, must not alone affect our comfort and efficiency but the worker's added joy and interest in her work must have a far reaching effect on the health and happiness of the whole family?

The Fascination of the Rug from the Orient

THE charm of the Oriental rug is elusive. The some-time householder often buys his first "Oriental" as he would a picture or a valuable book "just because he wants it." He may have no use for it nor any place to put it. The mystery of the Orient, the wonder of color and texture pervades the rug. There is an unknown quality in the design; which has been the only means of self-expression to generations of workers following the same patterns, beside which our studied designs seem lifeless if not crude. It weaves a spell over the imagination which is almost irresistible.

The practical American listens to all that is said about the fascination and the beauty of the Oriental rug, and then asks wherein its acatual value lies, and how it differs from the weaves of the West. In the first place the carpet is essentially an Oriental product. When civilization in the West was living on sanded and rush-strewn floors, the Oriental potentate had his wonderful rugs. Ancient gossip tells us that the tomb of Cyrus was covered with a Babylonian carpet, and that Cleo-



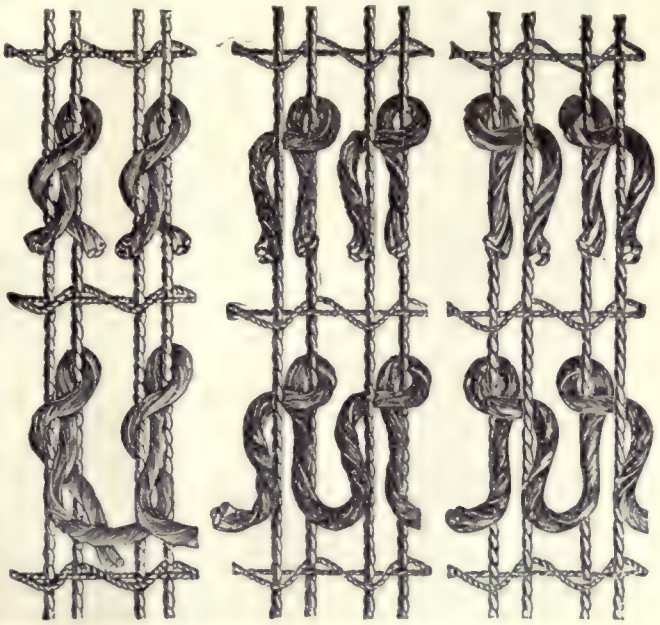
A woman's whole life goes into these rugs.

patra was carried into the presence of Caesar in a roll of carpet.

"Next to the quality of the material from which it is made and the dye with which it is colored, the splendid durability of the Oriental rug is due to the manner in which the pile is tied to the warp thread. So secureely is it tied that it is impossible to remove it by pulling either end of the knot. This differs from the domestic method in which the pile is merely drawn between the warp threads without tying or fastening. In the finer fabrics of the East the knots are so close that it requires careful examination to discover them, except in very old rugs where the pile is worn down, when the kot is distinctly seen."

The knot is the unit in the Oriental rug. The tiny stipend paid to the worker depends on the number of knots she ties. The pattern is counted out by the number of knots in each color. The fineness and the value of a rug, as with a cashmere shawl, is measured by the number of knots to the square inch. In some parts of Persia the best weavers are men, but in general Oriental rugs are the work of women and children. Little tots begin working at the loom when only four or five years old, we are told. A woman's whole life goes into these rugs. A skilful weaver can tie from twelve to fourteen knots a minute,—from seven to eight thousand knots a day.

The eastern loom is primitive. It consists merely of four poles joined together with ropes according to the size of the rug to be woven. On these the warp threads are strung and kept at the proper tension by weights, which are attached to one of the cross poles. "Beginning at the bottom and working toward the right, the wool yarn, which is to form the pile, is looped around the warp threads by the aid of blunt-pointed needles and then tied in such a way that by each knotting two of the warp threads are bound. When the Turkish knot is used, these two threads are bound side by side. When the Persian knot is used, if tied tightly, one is bound in front of the other. After each row of knots one or more weft threads are passed through between the warp threads and then beaten down with a sort of a comb. The pile is then trimmed to the desired length. The Caucasians and Kurds, as a rule leave a long pile, while the Turkomans and Persians clip theirs quite short. Close trimming brings out more minutely the color variations. The tigher and closer the knots are tied,—which is determined by the closeness of the warp threads, and the number of the weft threads between,—the more perpendicular is the pile and the more durable the fabric. Loosely woven, long-knapped rugs have more sheen than do

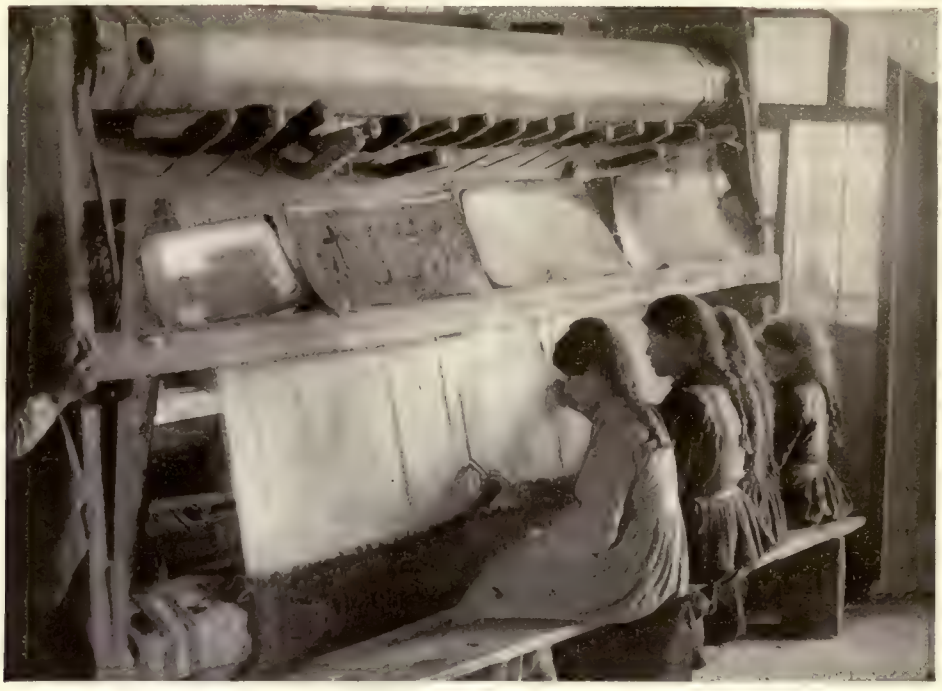


Showing the left and right Senna knots and the Ghiordes knot both before and after the trimming of the pile.

the tightly woven short knapped ones, as the long ends untwist and become more lustrous.

An Oriental rug has three values, first, the art value, depending on its color and design, second, the collector's value, depending upon its rarity, and third, the utility value, depending upon durability.

One likes to buy these rugs from a man of some of the eastern lands. He may have the business principles of the Oriental, but he knows and loves his rugs. Ask him a little more as to the design of a rug and where it is made, and he locates the spot in a very definite way, and unless you are a traveler or have an expert knowledge in things Oriental, he is immediately in a world practically unknown to the Occidental. Asking one such dealer, who is an American citizen, but whose fathers came from a far country, as to the life of the Oriental rug, he said: "In my country they last always, the wear is not hard,—but here, with your heavy shoes, it is different. They are not indestructible. In my country we walk on them with a soft foot. We sit on them. But your heavy chairs, your furniture, your boots,—no it is different." "The most beautiful rugs in my home were of my grandfather's time. They were not worn, —oh, no. They were perfect, with the softness and sheen of usage, and the colors, not so bright and strong. My grandfather's rugs had reached their perfection in my youth. Three generations, yes, that time makes a beautiful rug perfect." "In my country we wear no shoes on our rugs, we do not beat and tear them. The floor is not the only place for a rug. We have many uses. Yes, you see many prayer rugs, and saddlebags, and sometimes the rugs which young girls weave for their dowry. The pattern, the colors, they all mean something." He caressed the rug under his hand.



A Turkish loom.

From time immemorial the Oriental has been putting the best of his life into these tapestries, much of his thought and all of his imagination. "The transmission of

ancient patterns has been going on from century to century, the old designs and colorings being copied by weavers from one generation to another and many of those used at the present time are doubtless the same that were used in the time of Abraham."

"Each district, tribe or family had its characteristic patterns and color combinations which were regarded as its individual inheritance and were never copied by other districts, tribes or families. So it is possible for the expert to tell the locality from which an antique rug came, but the source of the modern one is not quite so accurately determined on account of modern changes in design.

The secrets of the eastern dye-pot are responsible for the unrivaled beauty and durability of the Oriental rug. These secrets of extracting coloring matter from roots, leaves, flowers, barks, and various other vegetable and animal products by a process of boiling, fermenting, etc., were guarded religiously and descended from father to son, many of them having been lost as the family became extinct. Each dyer or family of dyers has some peculiar and secret method of producing certain colors or shades.

Our much greater knowledge of chemistry has been of little help to us in our efforts to produce certain colors or to duplicate those which the Orientals produce with the simplest ingredients and without any scientific knowledge of chemistry. Every kind of plant from which dyestuff is obtained is dependent upon certain conditions of climate and soil. For this reason colors in one locality may be superior to those of another, and thus affect the rugs of the locality. Most vegetable dyes fade, but they fade into softer and more pleasing colors. Hence the greater beauty of older rugs.

The methods of weaving, however, have not changed in a thousand years, in the Orient. While in a few places the best artisans are men, in most sections the weavers are mostly women and children. Little children begin working at the loom when they are only four or five years old, and serve an apprenticeship of two years, after which they receive a few pennies a day. Rug weaving is the whole life of the women, with perhaps a little gossip. It is their amusement as it is their source of income. Many of the girls, especially in Asia Minor, with their earnings buy perforated gold coins with which they decorate themselves, as trophies of their skill and as doweries for their marriage.

In one of his books on Oriental rugs, Dr. G. Griffin Lewis says that if the women of the Orient are ever emancipated western countries will have much more difficulty in getting eastern carpets than at the present time. Only in a land where time is of little value and is not considered as equivalent of money can such things be done.

NOTE—The illustrations of the Oriental looms and of the knots are used by the courtesy of the J. B. Lippencott company. two of whose books on Oriental rugs, to which we are alse indebted, are noticed in another department.

Picturesque Philippine Ruins

Monroe Wooley

WARS, typhoons, and earthquakes have combined to make the Philippines rich in ruins. Perhaps no land anywhere can boast of a greater number of picturesque ruins, considering size, than can the island empire we own. The Spaniards as overlords of the country believed in solid forms of construction. Stone and galvanized iron were their favorite materials. But even these buildings could not withstand the onslaughts of war and the elements.

There is scarcely a town which cannot boast of one or more large ruins, either in the form of a church, a government building, or a private residence. Vegetation grows rapidly in the tropics, and over the remains of the old buildings (some of which were built centuries ago) dense growths have clambered in wild profusion, adding to the beauty of the picture. Many an American has sighed regretfully when viewing these old ruins, no doubt realizing what fine country homes they would make with a little renovation and remodeling if they could be transported bodily across the sea. But ruins, as in the case of live stock, is one of the things that cannot be brought into the United States. Publicity committees have long since become aware of the value of the ruins about Manila as show places for sightseers. But outside of this the old buildings are not being made use of to any extent. Now and then the government finds one that seems fitted for rebuilding to advantage, but this is not often.



"A Philippine Ruin."

If Americans cannot transport bodily the picturesque ruins from the Philippines they can do a much more satisfactory thing. They can have the picturesque without the ruins. Romance has woven itself so inseparably about the old ruinous and picturesque buildings that it has taken us long to realize that new buildings, planned to meet modern needs in the fullest degree, can also be given the element of the picturesque. The architect with a vision realizes this and many modern homes have the charm of detail and the picture values. California architects, familiar with the picturesque phases of the missions and perhaps of these ruins in the Philippines, are giving us some extremely interesting work. Notable among these architects is Mr. Irving Gill, of San Diego, a picturesque bit of whose modern work is shown.



A garden wall in San Diego.—Irving Gill, Archt.

Working under a brilliant semi-tropical sunshine and in a land where vines and shrubbery follow closely after the thought, architects, artists and home builders are developing possibilities which will ultimately affect the whole country.

"Our Big Idea"

Edward L. Singsen

A Building Experience by One of Keith's Readers

WE are writing this little story, my wife and I, of the creation of our home because we believe it to be unique.

When we became engaged, almost our first thoughts were of the house which some day we should make into a home. Many an ordinary couple (for we like to tickle our vanity with the thought that we are as much out of the ordinary as is our house) has started in the same way, and has dreamed of a cozy cottage, or a wonderful bungalow, and ended by renting a five-room flat. We also dreamed of a cozy cottage,—and looked for a "desirable" flat.



A building which looked like a barn.

The problem of acquiring a house to conform to our specifications on an income of about one hundred dollars a month seemed so difficult of solution that we had almost given it up when we struck the "Big Idea." While visiting friends one day in a neighboring suburb, we were shown the story and a half building which looked like a barn, and told that they (our friends) were considering the advisability of remodelling it, and renting it to some "nice young couple" (with particular emphasis on the "nice young couple"). That set us to thinking. The result was that we persuaded our friends to sell us the building with a good strip of land, and let us do our own remodelling. Things began to look rosy, yet the financing of the project cast a shadow of doubt over our plan. It would cost money, but that, too, was compassed as part of the big idea.

In arranging the floor plans, which we did ourselves, every foot is utilized to the best advantage, thus making the house, although quite small, appear very roomy and comfortable. The smallness of the kitchen, with its convenient arrangement of pantries and cupboards, allows for the roominess of the living room, with its big open fireplace.



Our house as we have made it.

From our blue printed plans we made contracts for the remodelling of the building, covering all of the details, which should convert it into our wonderful home. Thus we knew the cost almost to



Three steps to the landing.

a dollar before we went ahead, and we figured that by having mill work and materials all prepared and supplied under contract we had reduced the cost to our price, so that we need not hunt the "desirable flat." My "partner" was on the job practically every day during the building operations to settle vexed questions as they should arise.



These stones were all brought from the beach.

The cuts showing our home as we have made it, and the building as it stood before alterations were made, tell the story at a glance. The barn door was taken out and the upper part of the space filled with a triple window. Beyond is a hooded door. The loft door was closed and a window cut in on either side of it. A piazza was built on the front, screened in to make it a real summer living room. The outside chimney, built of tapestry brick, which gives a flue for the living room fireplace, can be seen through the tree. The old chimney was used for the furnace. Cement steps were put in at one end of the piazza and at the entrances.

The living room has the pleasant coziness of the big "homey" room. Comfort is the key note, and this is carried out even in the tan oat-meal paper and the natural oak wood work, which seem to reflect the feeling of companionship which the cobble-stone fireplace originates. To us this fireplace is without an equal in interest and beauty. A photograph may reproduce the lines and detail, yet it cannot show the many colors of the stones with their flecks of mica and marble hues, nor the romance of its building. These stones came from the famous Pebbly Beach at Block Island, R. I. My wife and I went down there with sacks and picked up every stone ourselves, each one selected because of some beauty of color or form.

After the informal ease of the living room, the almost severe lines of the Sheraton mahogany furniture give a touch of formality to the dining room, while the French doors add a sense of hospitality and good cheer.

The kitchen and pantries almost shout efficiency. The arrangement of the sink and set tubs makes possible the use of the zinc cover to the tubs as a drain board and general working surface. Hot cooking utensils may be placed upon it without injury to it, obviating the necessity of putting them in the porcelain sink. The gas range is another feature worthy of note. It is built

on the fireless cooker principle, with two large ovens, one a broiler, packed and lined like a fireless cooker. In cooking our Thanksgiving dinner we put a thirteen-pound turkey, two kinds of potatoes, turnips, squash, onions and a cake, all in the oven at once, had the gas on for a little over an hour, and two hours afterwards the dinner was served, piping hot, everything cooked to a turn, yet nothing overdone and no mixing of flavors. The steam did not make the cake soggy nor did the flavor of the onions permeate the other vegetables. The range has the ordinary arrangement of surface burners, except that they are covered over with a cast iron top, with lids similar to a coal range. This arrangement has proved very satisfactory as many utensils may be kept warm while but a single burner is lit.

To the right of the range is a kitchen cupboard which holds all the aluminum cooking utensils, a bread mixer, an electric flat iron and other things. In the pantry connecting the kitchen with the dining room, is a dish closet and a lower cupboard for flour, sugar, etc., on either side of which is a row of very useful drawers. A cold closet opens off this pantry, in which is refrigerator and numerous shelves to accommodate supplies of various kinds. The kitchen and pantry floors are covered with the best cork linoleum. The walls are painted light buff; the woodwork is yellow pine, finished natural.

Upstairs are two bedrooms and a bath. The latter has charmed all comers with its blue and white color scheme. The woodwork is white enamel, while the floor is covered with an inlaid linoleum of tile design in blue and white. The walls are wainscoted about four feet high with a pressed tile finish, and the upper part of the walls is tinted blue. The built-in medicine cabinet and the clothes chute are conveniences which cost practically nothing and are almost indispensable.

The smaller of the two bedrooms has two windows in it and a good sized clothes closet. The woodwork is in white enamel; the floor is hard pine. The walls are covered with a dainty paper of soft chintz design, with a drop border of apple blossoms.

The larger bedroom is the owners' pride. It has two casement windows on opposite walls with two full size windows on another wall. The woodwork and floor here are the same as in the other bedroom. A large roomy clothes closet with a chest of drawers in it and provided with an electric light, opens out of this room. We count it as one of our luxuries because it is large and has a light in it. The room is furnished in mahogany with twin beds of dull brass. The walls are papered with a pretty green paper and a drop border of wild roses.



A touch of formality to the dining room.

The hardware fittings throughout the house are all in dull brass. The electric lighting fixtures are of the square mission, wall bracket type, with a semi-indirect dome in the dining room, beautiful in its plain simplicity. The ornamental hinges and the hexagonal door knobs of the characteristic craftsman design, all lend that air of distinction which marks the worth-while from the commonplace.

These little marks of what we are pleased to call good taste are not expensive, but they show a degree of thought not always given to the construction of inexpensive homes. It is more the thought and care than the money that has made our house so attractive and comfortable, just the little things here and there which make all the difference between the ordinary and the exceptional house. That it is not the money which makes the difference is attested to by the fact that the entire cost, including the land, did not exceed $3,500, which figure includes the best of plumbing and a hot-air furnace which is the most economical and reliable I have ever known.

The one drawback to our whole scheme, which at one time threatened to disrupt the entire plan, was the question of gas. We had both made up our minds that we must have gas for cooking, yet the local gas company could not be induced to extend its pipes into this district. This caused us some worry and considerable planning. We balked at either coal or the "blue flame." Finally we solved the problem by becoming our own gas company. We installed a machine which generates gas from gasoline. No! not at all dangerous. The whole secret of its safety lies in the fact that the generator is thirty feet from the house, and that at no time is there any gasoline in the house, and no more gas than is normally flowing through the pipes. Nor is it expensive. We figure that the cost of our gas, figurin the maintenance cost, interest on the investment, and providing for a sinking fund, does not exceed what we would have to pay for city gas. The gas produced burns with a much hotter flame than does coal gas.

The most frequent remark we hear from friends who are shown through our house is, "Why, how do you get so much room out of such a little house?" We do it by putting the room where it is most needed. In laying out our floor plans we believed that large rooms and fewer of them would give most satisfaction. The results have demonstrated our success.

"Home" in An Apartment

WHAT was yesterday a luxury, expected only by the people of wealth, has become today a necessity demanded by every business man for his family. Money making is generally ascribed to the American people as the great motive of existence. Yet there is probably no people to whom a dollar, once possessed, has less value of itself. It is not money, but what money will buy, for which this terrible struggle is made. This is not a miserly or even a saving people. The comforts and the luxuries of living loom so large in the public eye that no effort is too great, no endeavor too strenuous for their attainment. Possibly the spirit of competition is at the heart of the matter. It may not be so much that people require these things for themselves as that they are not willing that their neighbors and friends shall seem to have more.

In no other line is this so apparent, with the possible exception of the automobile, as in living accommodations. The big, handsome "home" has been sacrificed, even by people of wealth, to the luxurious small "apartment." There has been a shrinkage in the cubic contents of the family home, with a distinct sense of relief both to the man of the house and to its mistress, overworked with the care

of many servants, and a large house.

The apartment, or any type of the multiple family house must originate as a matter of investment, as a general thing, though the co-operative apartment house has made its place in some of the more congested centers, among a certain class of people, and will probably develop further.

In general the greatest disadvantage of the apartment house is the exterior. It may be large and handsome, but it certainly is not homelike. The barnlike appearance of the ordinary duplex depreciates the property in any neighborhood in which it appears. No building which lessens the value of adjoining property is ethically good or right. Such effects will not follow if it is artistically good. Large and pretentious apartment houses have been built along the same lines as hotels and business blocks. They are in fact business buildings. No thought of home is associated with them. It is generally conceded that the great mass of apartment houses have been built with little or no architectural skill devoted to their design. The so-called duplex is almost entirely "contractor built," and looks the part. The interiors are planned to meet the need of that sometimes terrible person the "hypothetical tenant," but as a whole the planning is good. Otherwise the right kind of people would not rent it.

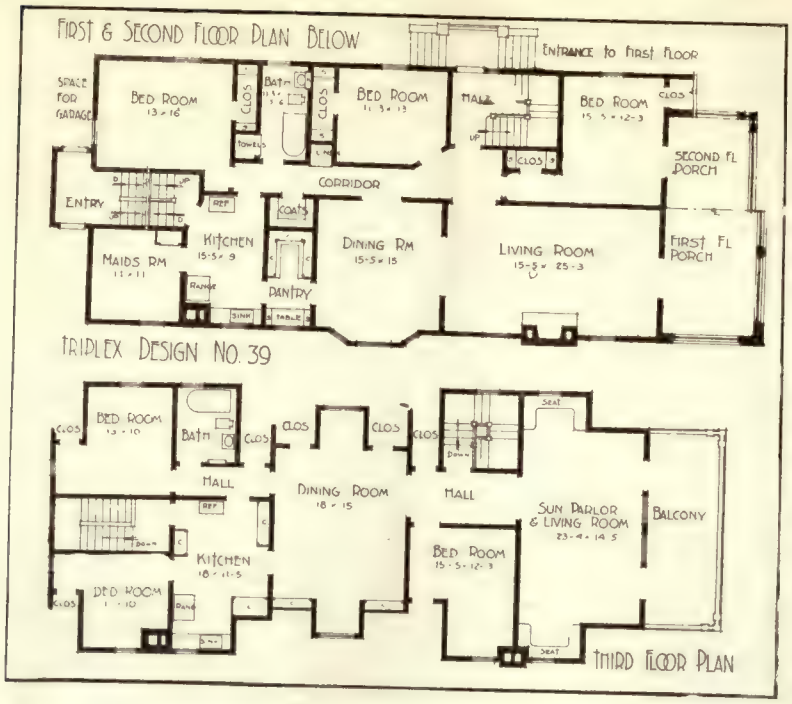
Public sentiment has not as yet taken cognizance of the exterior. So many generations of city people, descended from the old "brown-stone front," have only been sure they were entering their own home by looking at the number, or because the latch key fits, that the individuality of the "apartment house home" has not yet been demanded. The thought is already in the minds of people but it has not yet been loudly voiced. The architect has heard it and the real estate investor will soon feel its pressure.



A model triplex. *Walter J. Keith, Archt.*

A "Triplex" as An Investment

The cost of building has increased by leaps and bounds. The many luxuries now generally considered necessities, coupled with the more thorough and better class of construction and generally higher wages now prevailing, account in



large measure, for this increased cost of building.

The design for a model triplex here presented embraces what might be called a luxurious home, with a strong individuality, for those to be housed in it. The rooms are large, and there are plenty of them,—for in these days few are content with a living room less than 15x24 feet, and other rooms in general proportion. True, the rooms could be reduced in size, but there remains just as many bath rooms, radiators, windows, doors, stairways, chimneys, laundry fixtures, closets and porches; so merely reducing the size does not save very much, only a little material and labor.

The modern home of today must in addition to ample sleeping and living porches, also provide garage facilities, and all this means increased investment; but as an offset there is unquestionably increased revenue to the investor, for what was considered a few years ago a large rental, is now considered ridiculously small.

In cities of the second and even of the third class, apartments on the first and second floors, smaller and less desirable in every way than in the design here illustrated, but in a desirable locality rent for $100 per month each, and the tenants are compelled in addition to run their own individual heating plants; while smaller apartments on the third floor rent for from $50 to $60 per month. What then would be a fair and reasonable rental for the same apartment heated and with garage facilities included? These are the things which must determine the desirability of an investment and they vary in every city and in the same city according to location and environment.

This design built in a substantial and thorough manner, finishing completely the apartment on the third floor and with an apartment for janitor in the basement, three large individual store rooms, general store room, laundry, and help's bath room would vary in cost according to prices and conditions and the competition among builders for the work from $10,000 to $14,000 complete with hot water heat, modern plumbing, hardwood floors throughout, and hardwood finish in the living room of each apartment and in entrance hall.

It would seem, therefore, that this would make a desirable and profitable investment, as such apartments will not fail of steady rentals by responsible people at the highest prices.

Under the Sheltering Roof Tree

THE first essential of the house is the roof, and perhaps for that reason the type of roof often gives the key to the design. Travelers say that the roofs of a city mark its individuality, and distinguish one city from another in the old countries. The overhanging eaves, "the roof tree," stands as the symbol of home in its protection and shelter.

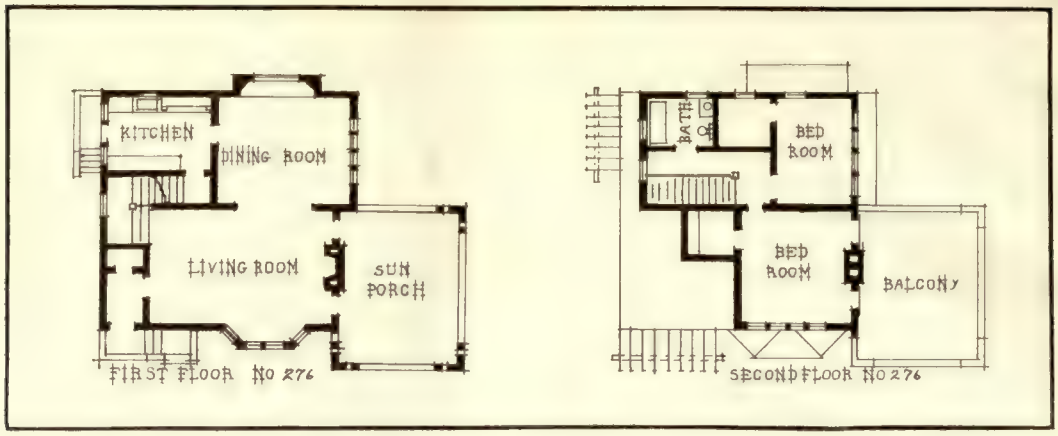


The roof gives the key to the design. *Lindstrom & Almaas, Archts*

This attractive home has a clever roof treatment. Only the central part of the house is two story and dormers give the necessary height where it is desired. The exterior of the house is finished in cement stucco on metal lath. The vitrified Spanish tile roof has a wide overhang.

The plan is very simple and attractive and yet quite unusual. The main axis of the plan centers on the bays in the living and dining rooms, and the second story centers over these same features. On one side of the living room is the entrance and on the other is the sunporch. The vestibule is of good size and has a convenient coat closet. Stairs to the second floor lead up from the living room near the entrance door. An attractive landing is three steps above the main floor.

The living room is nearly fourteen by twenty feet. On the farther side from the entrance is the fireplace with French doors on either side opening upon the sunporch. Back of the living room is the dining room, with a pilastered opening between. Opposite the opening is a wide recessed buffet with mirrors and sash above. The walls are panelled, with plate shelves and cornice. The quadruple group of casement windows are hinged to swing in. The interior of these rooms is finished in hardwood, with hardwood floors.



The kitchen is long and narrow, the shape best adapted to give plenty of wall and cupboard space, with a minimum of floor space. With all of the conveniences at hand, by smallness of the floor space is the housekeeper's work decreased and her efficiency increased. There is less floor to be taken care of, and fewer steps will accomplish the results. Cupboards are built to the ceiling, with bins and drawers under the working shelf. There is a window over the sink. The ice box is built on an outside wall, where it can be iced from the outside. This with space for the gas range and table makes the kitchen complete. It is finished in enamel paint and the floors are hardwood.

On the second floor are two well proportioned bed rooms with large closets. Each has a group of casement windows. The wall space allows for a good arrangement of the furniture. From the front bedroom French doors lead to the balcony which may be fitted up as a sleeping porch. The bath room is well located with reference to the bed rooms, but it is especially well located with reference to the plumbing pipes. The bath room fixtures are directly over the fixtures in the kitchen and laundry, with all the pipes running up in the wall of the kitchen, making the shortest possible connections for the sewer, and the water supply. The second floor is finished in white enamel with hardwood floors.

There is a full basement under the whole house, containing laundry, heating plant, fuel and storage rooms.

Bungalow with Attractive Cement Porch

THE psychology of first impressions is an important thing to the house builder. The first glimpse of a house gives a bias to the mind which is not easily replaced. The visitor as he enters this attractive porch is prepared to be pleased with the entire house. Indeed, all of the house is planned with the same care and skill.

The porch is eight by seventeen feet. The white cement of the battered columns carried in the porch foundations and terrace and repeated in the cement chimney are extremely effective. The cement also makes an excellent background for planting and vines. The low French windows opening on the terrace from the living room make one of the

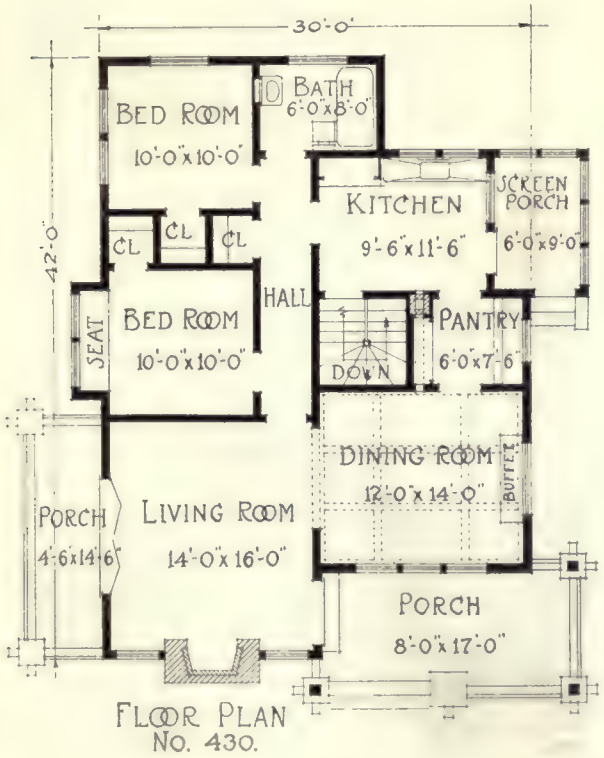
attractive features of this design.

The arrangement of the living room and dining room shown on this plan, the architect considers particularly successful, as his clients have found it very satisfactory. It is particularly planned for a small bungalow where the vestibule or reception hall has to be omitted for lack of space. This arrangement gives more privacy to the dining room, as it is out of the view of the chance caller. The fact that each room has an outlook in two directions appeals to the home builder.



The cement makes an excellent background. *Jud Yoho, Archt*

The living room is particularly airy as it has doors opening to the porch and to the terrace on the opposite side, and windows on either side of the fireplace besides. The dining room has a beamed ceiling and a built-in buffet under the window. An unusually roomy pantry connects it with the kitchen, and gives good cupboard space. A little hallway secludes the sleeping apartments from the rest of the house while connecting them and giving entrance to the bathroom from any part of the house.



FLOOR PLAN
NO. 430.

The bedrooms are not large, but you can locate the furniture nicely in each of them. The double window and seat in the front bedroom makes a very attractive feature. The rear bedroom has windows on two sides, giving cross ventilation. Each bedroom has a closet and the linen closet opens from the hall.

The appointments of the kitchen have been carefully worked out. The sink is placed under the windows and has particularly good sink tables and drain boards. Beside it is a cupboard the full height of the room. The screened porch gives a good working space, which every housekeeper appreciates.

Twin Gables

NOTHING is of greater importance in the planning of a home than the windows. Their placing and arrangement make for the beauty of the exterior and comfort of the interior of the house. Sunshine is the greatest doctor in the world. There is or should be no reason why every household should not have the constant attendance (when on duty) of this great health giver. The architect generally feels it to be one of his duties to plan for plenty of light and air. Then when the figures come in and the cost must be reduced some of the windows are omitted because a plain wall space is a little cheaper than windows, though any one knows that windows are vastly cheaper than doctors' bills, to say nothing of the effect of the omission on the outside of the house.

The house which the owner has called "Twin Gables" is flooded with sunlight. Being set at a slight divergence from the points of the compass, there is no sunless side to the house. It is surprising how slight an angle, either to the east or the west, will allow the sun to enter the north side of a house. It seems an absurd custom which sets a house in the only possible position which makes the north side of it ice bound during the cold season.

The entrance to this house is recessed, giving it protection, and opens into a good hall which is large enough to give a good connection between the entrance, the stairs, the dining and the living rooms, and yet has a good seat for a waiting guest, not to mention the insidious book agent. One end of the living room is a wide bay filled with windows; French doors open onto the screened porch. A group of windows light the fireplace. Yet these are so arranged that there are good wall spaces. The room is 15 by 21 feet. The wide fireplace is the chief feature of the end of the room opposite the bay. A



The house is flooded with sunshine. *Marion Alice Parker, Home Planning.*

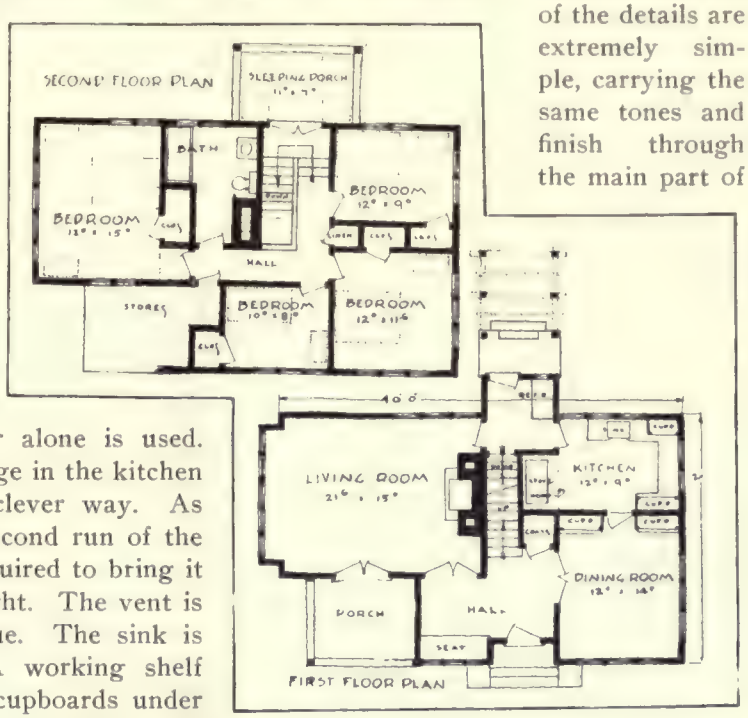
door from the living room connects with a passage way from which stairs lead to the basement, and which also connects with the kitchen. The rear entrance which is pergola covered, also connects with this passage.

French doors connect both the living room and the dining room with the hall. A coat closet is beside the stairs. The dining room has groups of windows on two sides. Built-in cupboards fill one side of the room. Two doors, one sliding into the wall, closes the dining room from the kitchen to keep out all odors. When the meal is being served the sliding door is pushed into its pocket in the wall and then the swinging door alone is used.

The hood over the range in the kitchen is managed in a very clever way. As it is placed under the second run of the stairs, less furring is required to bring it down to the desired height. The vent is carried across to the flue. The sink is under the windows. A working shelf with bins, drawers and cupboards under it, fills one end of the room, with cupboards over it beside the windows.

On the second floor the rooms are again filled with windows without interferring with the wall space necessary to accommodate the furniture. Each bedroom has a good closet, a linen closet opens from the hall and the space over the porch roof is utilized for storage space. Over the front entrance is a sewing room which may be used as a single bedroom. From the landing of the stairs is a sleeping porch which overhangs the rear entrance. It is arranged to accommodate two single beds or couches. French windows from the landing light the hall and give an interesting vista from the entrance.

Casement windows always make an interesting feature in a house. They open the entire space of the window, instead of only one-half. When properly designed and fitted with the necessary hardware they have proved to be entirely satisfactory, without adding very materially to the expense. All of the windows in this house are casements. The finish and all of the details are extremely simple, carrying the same tones and finish through the main part of the first story. The finish in the kitchen is kept in the natural color.



There is a full basement under the house which is arranged to accommodate the laundry, heating plant and the usual fuel and storage rooms.

The gable roof, extended to cover the screened porch, accents the double gable and gives an interesting feature. The wide chimney centers on the main ridge of the roof.

The planting, always a valuable adjunct, is here shown in an interesting way. Bay trees stand at either side of the entrance. Shrubs and flowers are banked against the porch.

A Story-and-a-Half House

THE story and a half house has come into the favor again, which it deserves, for it is convenient, economical, and often picturesque. This house is shown as finished with cement stucco over metal lath, though it would be equally effective in shingles stained either brown or gray, with the roof a little lighter or somewhat darker than the body of the house.

The main roof is extended on one side to cover the entrance porch and on the other, over the sun porch. The rafters are exposed both on the main roof and in the dormer, and the same accent is carried out in the rafter ends which protect the dining room window. The flower boxes built in the porch give a touch of color which might be repeated under the windows and at the sun porch if desired.

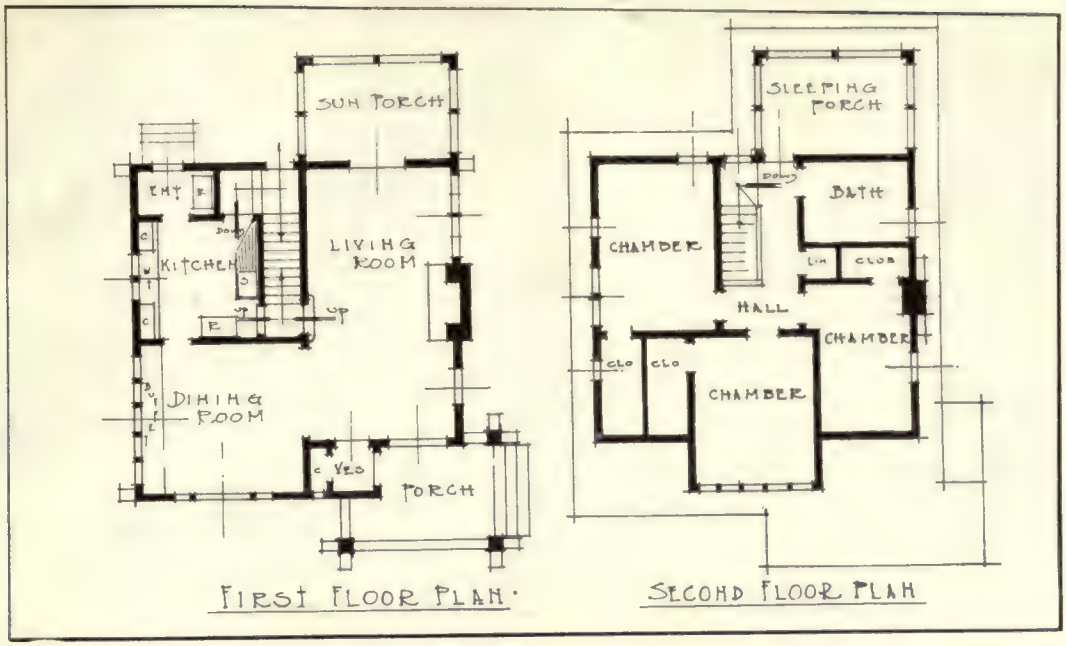
The plan has a little different arrangement from the typical plans, in the slight irregularity of the arrangement. The entrance is through a vestibule, which has a coat closet, into the end of a well proportioned and good sized living room. The fireplace is centered on one side of the room between windows, and opposite is the stair landing. Glazed French doors in the end of the living room opens onto the sun porch, which is also glazed. A wide cased opening gives communication with the dining room.

A buffet fills the end of the dining room under a group of high windows. Two sides of the dining room are largely filled with glass.

The kitchen is very compactly planned. The stair landing is reached both from the kitchen and from the living room side. Under the windows is a work table,



The main roof extends down over the porches. *W. W. Purdy, Archt.*



extending the whole length of the kitchen, with bins, drawers and cupboards under. Cupboards are built on either side of the windows. The refrigerator is placed in the entry. The basement stairs are built under the main stairs with an outside entrance at the grade level.

On the second floor are three chambers, with good closets. Coming under the roof as they do, there is good storage room beside the hanging space. The bath room is of good size. The sleeping porch opens from the hall.

In the basement is the laundry, fruit and vegetable rooms, place for the heating plant and fuel rooms, and a toilet.

The exterior has a red and white color scheme, with the red of the roof, which may be a light red asbestos shingle, and the very light gray of the rough cast cement stucco. The chimney is stuccoed over, with a cement cap.

The Cottage of Your Dreams

A TIMBER and stucco cottage, a hooded entrance, overhanging gables, small panes of glass, clambering vines, all of these are what you expect in that charming little cottage you are going to build. Add to these a glazed piazza and a sleeping porch, a fairly large living room, convenient kitchen and compact plans; does not it seem like a description of the cottage of your dreams?

This cottage is really very well planned to utilize all of the available space. Notice the turn in the stairs which, while allowing them to lead from the living room as well as from the entrance, at the same titme makes space for a coat closet. The basement stairs and grade entrance are under the main stairs. A short run of stairs from the kitchen leads to the main stair landing, giving the desired communication with the rear of the house.

The living room, across the front of the house, is a little more than twenty by

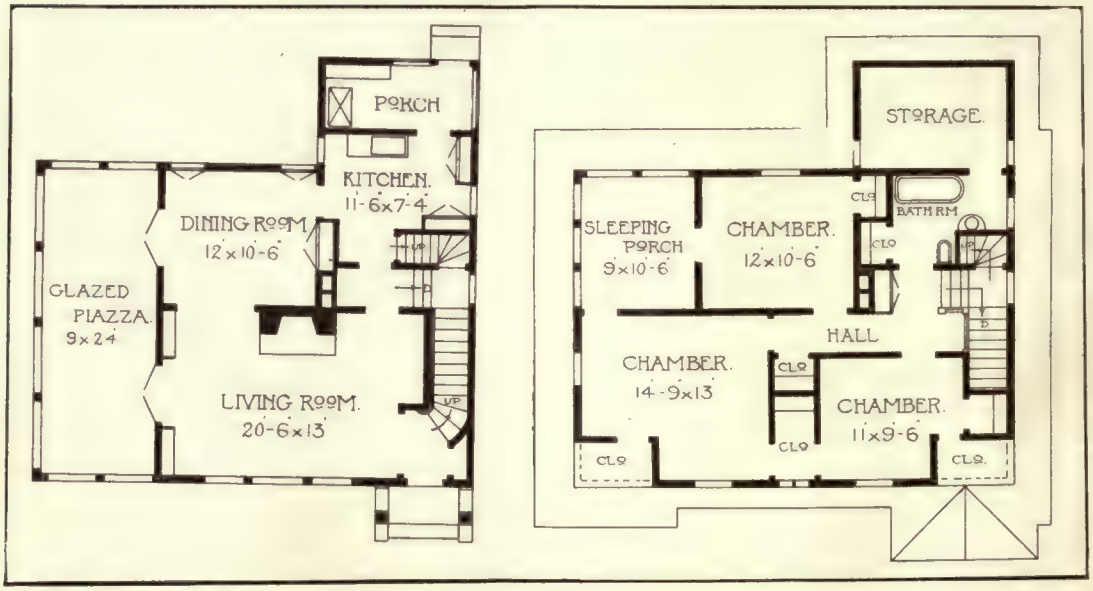


A timber and stucco cottage. *Chas. S. Sedgwick, Archt.*

thirteen feet. The wide fireplace is centered opposite the group of windows. Beyond is the dining room with a wide opening between. It has a conveniently built-in china cupboard. Both living and dining rooms open by French doors on the glazed porch. The living room has bookcases on either side of the French doors.

The kitchen is fitted with cupboards. The sink is well lighted. The screened kitchen porch has shelves and may be used for a working porch or summer kitchen. The refrigerator is placed here.

On the second floor are three bed rooms and a sleeping porch communicating with two of the rooms. The two front bed rooms connect through a large closet,



each of the rooms having an additional closet under the roof. The hall closet will prove very useful. The linen cupboard is opposite the landing of the stairs. The bath room is located over the kitchen and gives very direct connections for the plumbing fixtures. The storage space under the roof of the kitchen porch opens from the bath room. The second floor is finished in pine and painted white. The floors are of birch.

The main floor of the house is finished in Washington fir, stained a "Mission" brown. The floors are oak and finished in the natural color.

The height of the first story is 8 ft. 6 in., and the second story is 8 feet. The double gable gives full height to the rooms. The roof is shingles and the eaves have a wide overhang. The gables have virge boards, with the rafters exposed on the under side. The exterior is finished in cement stucco on metal lath, and given a creamy tint. The timber work and casings are stained a Mission brown while the roof is stained a dark red. The architect gives the estimate of cost of building as from $3,400 to $3,800 exclusive of the heating and plumbing. There is a full basement under the house.

Home for a Physician

IT IS almost necessary for a physician to have an office in his home or a den which he can use for an office when he wishes. The life of a physician can not be so regularly ordered as that of other men. He can not close his office doors downtown and shut out business calls until he opens them again. His work follows him day and night.

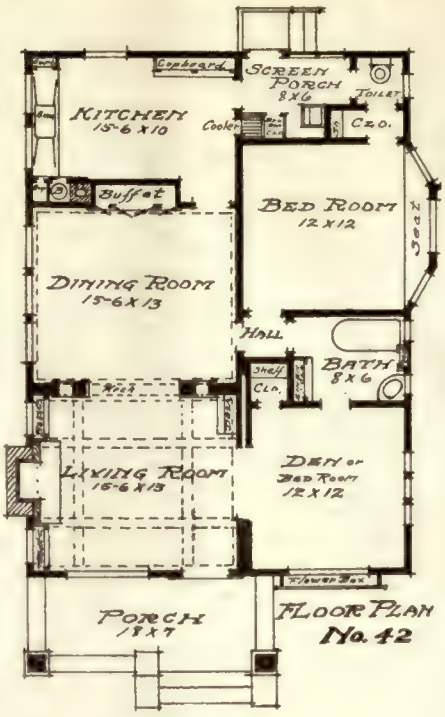


The wide eaves are carried on brackets. *Bungalowcraft Co. Archts*

In this plan the den is a good-sized room, opening off the living room. It does not invite business with an outside door, though this could be arranged if it were desired. It simply takes care of the merciful business which is thrust upon it.

The arrangement is not unusual in any way. The entrance from the porch is directly into the living room. A fireplace and windows fill the side of the living room opposite the den. It has a beamed ceiling, built in book cases and cozy seats with hinged tops, giving "tuck-away" places for papers and magazines and the usual general miscellany, or they give a place for the children's playthings. The dining room beyond with its wide opening is only partly screened. A buffet is built into the wall opposite. The niche

thus formed in the kitchen makes room for the chimney and the hot water tank beside it. The white kitchen is a model of convenience, and one of the most attractive rooms in the house. The kitchen appointments are quite complete, with long sink tables, and cupboards at the ends, while there are unusual conveniences opening from the screened porch. These include a "cooler" with a door to the kitchen, a tiny broom closet, an extra closet, and a toilet which opens also through the closet to the bedroom. This bedroom has a large bay of windows and a window seat. A tiny hall connects this bedroom with the dining room and also with the bathroom,



which again opens into the den. This arrangement allows the den to be used as a sleeping room, if so desired, for it is provided with a good closet, and may be shut off from the living room by the sliding doors.

This house is about 30x46 feet. The exterior is of wood. It is shingled up to the water table and weather boarded above. A flower box under the den window adds a touch of color to the otherwise dark exterior. The roof is shingled, built at a quarter pitch, and so strongly built that it will carry any snow load. The wide eaves are carried on brackets, which with the cornices are stained to match the weather boarding.

Homes of Individuality

Selected by W. J. Keith, Architect

A "Dutch Colonial" House

A WELL designed colonial entrance always gives a note of interest to a house. The gambrel gives two angles to the pitch of the roof. The pitch at the ridge is continued over the big dormer, which in its place carries up the lines of the two bays. The gambrel is only framed at the gable ends, giving a full second story heighth for the bedrooms.

The floor plan has the central hall so usual in the fine old colonial houses. The stairs are set so far to the rear of the hall that the full nine feet of width makes a hospital entrance. Glass doors connect with the living and dining rooms. The living room is the full width of the house, with the recessed fireplace, and with bays at each end of the room filled with windows and a seat. On the other side of the house the dining room has a corresponding bay. An extension beyond provides an unusually roomy pantry, well supplied with cupboards. Communication between the kitchen and the front hall is supplied through the small rear hall, which connects as well with the rear stairs to the main landing, and also down several steps to the grade entrance and



The delicately detailed entrance is effective.

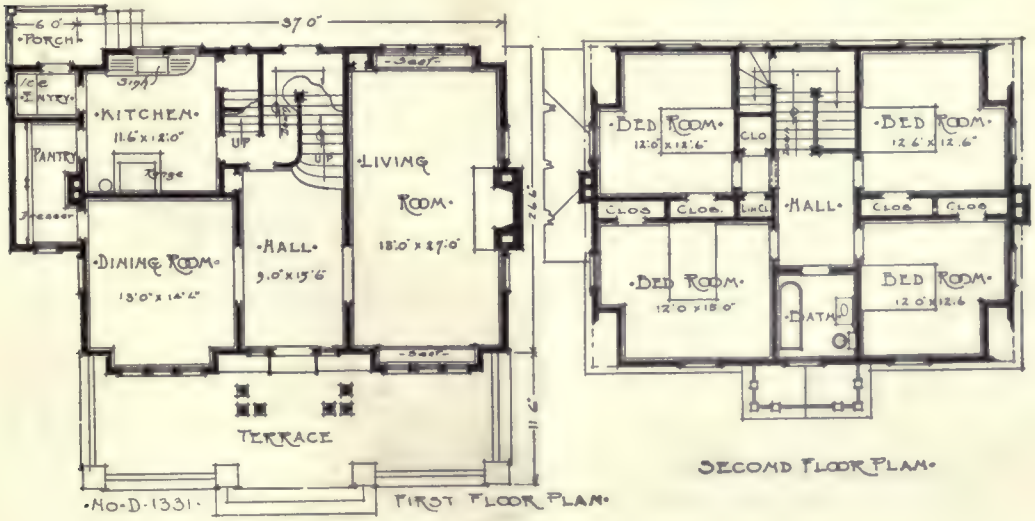
to the basement. The arrangement of the stairs is very compact and very good. The kitchen has the usual conveniences. The ice box is placed in the entry, beyond which is the rear porch.

On the second floor are four good bedrooms and a bath, each with windows in two sides of the room, and with good closets. This makes all of the bedrooms corner rooms, with cross ventilation. An extra closet and the linen cupboard open from an alcove of the hall.

In the basement are placed the laundry, the heating plant, vegetable and fuel rooms.

A Narrow House

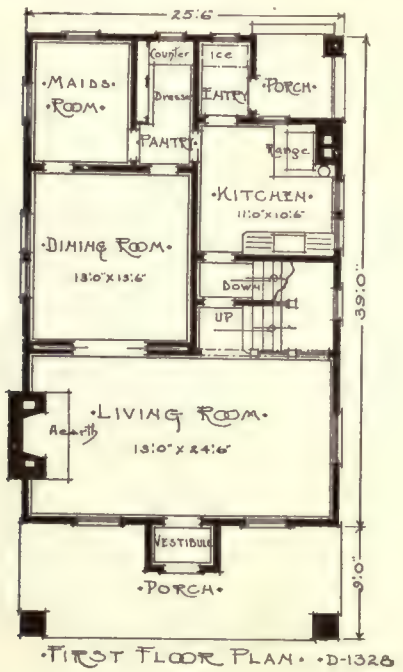
Here are plans for a seven-room house which is under twenty-six feet in width. The stone piers of the porch and the long sweep of the roof give an interest to the approach. The entrance from the vestibule is directly into the living room. On the plan, this direct entrance allows the living room to extend the full width of

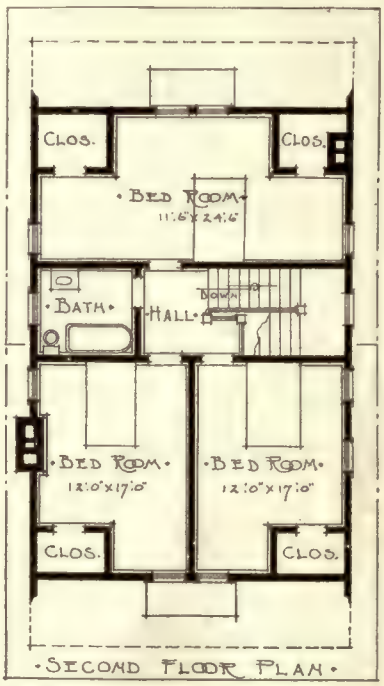




The stone porch piers give an interest.

the house, with dimensions of thirteen feet by twenty-four. The fire place is the main feature of one end of the living room, with sliding doors to the dining room just beyond. The stairs are partly screened from the other end of the living room. The stair arrangement is exceedingly compact and convenient. While there are two doors between to prevent odors from penetrating, yet there is direct communication between the kitchen, the stairway, and the front door.





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The Case for Yellow

WHY I do not know, but it takes a great deal more courage for the average person to use a good, strong yellow, than to adventure with red, or even with vivid green. And yet yellow is such a valuable color from the decorator's standpoint. It is a becoming color, as neither blue nor lavender is, it does not try the eyes and the nerves, as red does, and it gives an illusion of sunshine to the dullest room. All these are strong points in its favor, and yet it is very little used. Perhaps it has for most people a suggestion of splendor inappropriate for daily use, derived from seeing old fashioned drawing rooms, whose heavy mahogany furniture was covered with yellow satin damask.

Be that as it may, yellow is an admirable color and deserves to be more popular than it is, both in its own tones and in those of its sister, orange. It is equally adapted to cheap or expensive furnishings, and goes well with a good many different woods.

In selecting tones of yellow it must be borne in mind that it loses a great deal by artificial light, the light tones looking extremely washy at night. This is not very material in a bedroom, but in a living room must be reckoned with. A yellow of about the color of daffodils is a good wall color, though, of course the vivid tone of the flowers is subdued somewhat for decorative uses. A tinge of either green or brown is an improvement, though it should not be sufficient to change the character of the yellow greatly. These modifications give us mustard and citrine, both capable of good things in combination with the right sort of furnishings, but not specially beautiful in themselves. Old gold, another modification of yellow, is a charming color for a background, especially in some sort of wall covering which has a sheen. I know of a drawing room where Japanese grasscloth in old gold has been used for the walls, as a setting for a collection of fine old mahogany. It is a color that one very often sees used as a lining for the walls of small galleries in which either china or pictures are shown.

Plain or Patterned!

You can get a very good yellow in the different sorts of wall coating, and this surface is excellent for back halls, for bathrooms, or for bedrooms, but I do not think that a painted yellow wall ever looks well. The best sort of a yellow paper is one in an all-over pattern, not too small, in two tones only slightly differing in depth, in which the design is carried out by means of a line of the darker tone. This is the sort of paper which originated with William Morris, but his ideas have been largely borrowed by later designers, and papers of this kind are made by all the best factories in the United States. The two toned yellow striped papers are not bad, but are not nearly as decorative as those with a pattern. When a modified yellow, like citrine, is used, and in a room with many pictures, so that there are no large wall spaces, an imported ingrain paper is satisfactory.

Woodwork for Yellow Walls.

A patterned yellow wall is charming in a room with a high white wainscot, but when there is only a surbase and the ordinary door and window frames, they had better be of a darker color, which makes a less vivid contrast with the strong yellow. Either brown mahogany,

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(176)

or brown oak looks well with yellow, and best of all is black, which is much used by English decorators. Now we have got used to cretonnes with a black ground and to black carpets, black woodwork ought not to seem eccentric. Mustard and citrine can be used successfully with rather dark weathered green woodwork and furniture.

Blue China in the Yellow Room.

The taste for blue china is so widespread that its proper setting is a matter of interest to many people. Too many assume that a blue room is the best thing for it. Yet I am quite sure that nowhere, as a rule, does anything offend the artistic eye like the room with much blue china and a blue and white wall paper. It is quite possible to get a dull blue paper which will be a good background for some pieces of blue china, and if one's china is all of one shade of blue, the room may look very well. But this is seldom the case, and the blue which will harmonize with Staffordshire may be hideous with Canton or Delft. As for the figured white and blue wall paper, which the decorator will probably recommend, it will give you neither harmony nor contrast, but a hopeless jumble of tones, when you come to set out your china. If blue and white has an irresistible attraction for you, as it has for some people, have your room frankly white, white paper, white woodwork, and for rug and curtains use the dullest blue you can find, in a medium tone.

But, as far as blue china is concerned; one charm of the yellow wall is that any and all blue china is at home with it. Whether it is the very deepest blue of some of the Chinese wares, the brighter but still dark tone of the Staffordshire, the medium shade of Nankin, or the gray blue of Canton willow pattern, one and all contrast delightfully with a yellow wall. For myself, I have a great liking for green as a setting for blue china, but for pleasurable daily use there is no comparison between yellow with its effect of perpetual sunshine and the soberness of the low toned greens which can be used with positive blues.

Yellow and a Neutral Scheme.

One merit of yellow is that you can make it the high light of a neutral scheme of color, for the ground floor of a house without spoiling the harmony of the whole thing. With buff in the drawing room, golden tan in the hall, golden brown in the library or living room, you can have a yellow dining room, not of course choosing a very vivid shade. Or, keeping the neutral tone in all the other rooms, you can have a small formal parlor in yellow. And for this use you will find a not too strong yellow a delightful background for all sorts of dainty furnishings. If you happen to have delicate line engravings, or old prints, in gilt, or narrow black frames, they will be much at home on the walls.

When the whole floor scheme is in low toned green, one room may well have a citrine wall, which is a delightful back ground for blue and green furnishings, and for furniture in very dark wood. Black and gold Chinese lacquer, which is now so popular is brought out well by a citrine wall.

The Need for Caution.

Any extensive use of orange is a difficult matter. It is unfortunately a patrician color, and is at its worst in cheap materials. Orange cottons are horrible, except in the form of velveteen, when they have lost their distinctive cotton character, and there is not much more to be said for orange wool, except in rugs. Even in wallpaper, orange seems to need the suggestion of richness and to imitate silk or leather. But in silk damask or in Spanish leather, and in tones a good deal lower than those of nature, it is a stunning color to use for the high light of a brown room, and all the better for the purpose if it can be associated with either bluish green or greenish blue. A dusky, brownish orange in either a silk fiber or a leather paper is a delightful wall covering for a hall, above an oak paneling.



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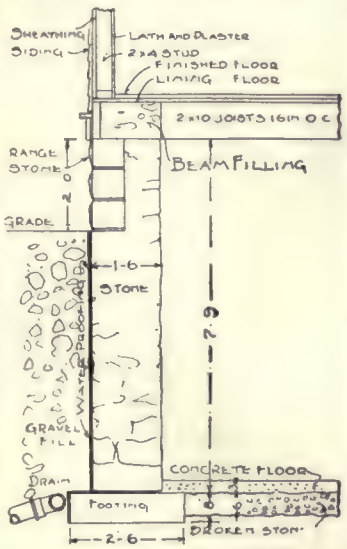
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(Fig 6)
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ANSWERS TO QUESTIONS
ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Locating the Fireplace.

A. H. L.—We are building a new story-and-a-half bungalow in this suburb of Chicago. We want an attractive interior as well as exterior. Having built two beautiful homes some years ago, with the aid of your magazine, one of which especially was so pleasing and attractive that we were able to sell it with a good profit, we thought it quite impossible to build a pretty modern little home without your magazine and your special advice. What I want to ask is, where to place the mantel. The house faces south and east toward the Desplaines river. Would very much like the mantel in the living room, but find no place except in corner of stairway and bay window. Would you place it straight or diagonally? or would you put it in dining room opposite window? or would you advise a mantel in music room? We don't like to go to the expense of more than one mantel. Would you also please advise us how to decorate the walls of the living room, dining room and music room in a pretty, inexpensive way? The three rooms and stair are oak. I also have a large velvet rug, rather bright green, size 12x16, with small figures of tan, red, black and blue. I could possibly make two rugs of it, one 9x12 and one 7x12, but there is not enough of border for the two rugs. I have also tan body brussels and a Wilton velvet blue. My best furniture is mahogany, with green upholstering.

Ans.—We advise locating the fireplace and mantel in the music room on the east wall, making a high window each side of the mantel in place of the group of three windows you now have on the sketch.

In view of the your rugs and furnishings, we should treat these two rooms, viz., den or music room and living room, together and use a scheme of green and blue through them. This will suit the south, east and west exposures and enable you to work in your rugs. We would use the oak trim in hall and dining room, with oak floors throughout; but in living room and music room we advise birch stained dark mahogany, as best with your furniture.

The large 9x16 rug we would divide, making one 9x13 rug for the living room. The remainder we would have woven up into two small rugs which would be very good in the narrow spaces of the hall. It would be a very great improvement if you would have the living room portion of this rug dyed a darker, richer green and the expense would not be great. We would then use on the walls of both rooms a paper in a small-figured all-over design in dull greens and blues, and place the blue velvet rug in the music room unless it is too light and too bright, in which case we see nothing for it but to dye that also a dull, deep blue. The tan body Brussels should go in the dining room with the oak furniture and woodwork. It would be pretty to do the walls of the dining room in old gold grass cloth paper with ivory ceiling. A plain paneled wainscot would add to the room, of course. We would have a center light in living room; also side brackets each side bay window and a center light over table in dining room. Side lights for balance of house.

Brown Mahogany.

M. L. G.—I would greatly appreciate suggestions that you might make in regard to the wall decoration, woodwork and furniture of the dining room, living room, den, hall and bedroom of the enclosed rough diagram. The house faces the west and south. There is a circular

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porch extending along the entire west and south of living room.

The dining room has triple windows with south exposure. The house is finished in yellow pine but what would you suggest as to the staining. Which do you consider the better, sand finish or smooth plastering for the walls?

We have a few pieces of mahogany furniture, piano, chairs, etc., but are not certain whether we wish the entire living room furnished in this way.

We had thought of finishing the living room and den in brown and dull green and dining room in old blue.

There are sliding doors between the dining room and living room. The latter is separated from the nook by colonnades.

Ans.—First, the finish of the woodwork is to be considered. We think for a small house with pine for interior trim, we would not furnish the living room entirely in mahogany. If the pieces you have are supplemented with a few wicker pieces, we think you will like the effect. In that case we would use a brown mahogany stain in living room and den. There is a new stain called English brown, which would be just the thing. As it may be difficult to get as yet, you can come very close to it by mixing a mahogany and a brown oak stain, half and half. Southern pine takes the stain beautifully.

The woodwork in the dining room we would certainly paint ivory white, if your furniture is suitable. Then with old blue walls and rug it will be very pretty indeed. A soft greyish ecru wall would be the best choice for living room and den, but we would not use green too much in these rooms. A mixture of old rose and green would be better. The rugs could be in mixed coloring of ecru, rose and green, with green predominating in living room furnishings, and rose or dull coppery red in den. Then have fireplace brick of the mixed oriental colors.

As to finish of plaster, if you tint, a sand finish is prettier but do not have it too rough. A smooth sand float is best. In our judgment the wall in dining room at least to chair rail height, should always be protected by a covering of some kind, burlap or paper or grass cloth, as the plaster so soon mars. It can be divided into panels by strips of wood and finished by a molding at the top, then tint the wall above.

Color for Walls.

O. S. Q.—Would like to have you give me advice on interior decorations for the house in the early spring. Can say there will be oak floors on both second floor and first except kitchen, which will have cork linoleum, all oak trim, plain in kitchen and second floor, the rest quarter sawed oak, all stained dark oak or flemish, except in kitchen where it will be natural oak. Hall and sitting room will have skeleton oak panels 48 inches high and dining room 66 inches high, and there is to be beamed ceiling in the three last named rooms, slab doors, and trim all heavy oak; trim to be square edge and plain. Furniture to be oak and of heavy design. Would prefer flat finish paint for walls. First story, 9 feet 5 inches high in clear, second story 8 feet 3 inches high.

Ans.—In reply to your letter asking about wall color suggestions for interior of your house, the living room facing south and west should have a neutral wall tone, especially with dark heavy woodwork. We advise a cool grey tone for this room. We would suggest the wood greys, merely using a darker shade for the skeleton wainscoting. This grey may be made somewhat lighter in tone by mixing some white with it. Then use the light grey for the ceiling. As the hall is really a part of the living room, we would treat the walls the same, but give variety by using rose red in rug, etc., in hall and old blue, brown and cream in living room rug, with blue hangings and furniture coverings.

Then paint the dining room wall above the wood paneling delft blue, again lightening the tone slightly by mixing some white and the ivory paint for ceiling. We think running the blues and greys through these rooms with touch of red in hall, will make a very pretty effect.

For the wall tints of bedrooms, we advise rose tint and white ceiling for the northwest bedroom. For the southwest bedroom a blue tint. For the southeast bedroom, pale green, and for the northeast bedroom, light tan.



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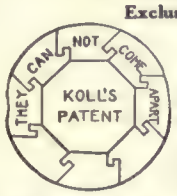
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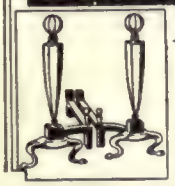
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Exterior view, showing appearance in building.



Interior view showing seat and windows.

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out of doors on a platform built for the purpose of receiving it. A panel back the width of the opening fills the space between the casement sash and the bed. This panel back is on weights and pushes up to open the bed, the seat which is hinged, to cover the part of the bed remaining inside the room, having been folded up against the panel before raising it. This is seen in the cut where the bed is shown open. A series of hoods and awnings are so arranged as to be easily



Interior view, showing full-size double bed.

shifted to either the inside of the house or the outside, being controlled either from the room or from the bed. There is a weatherproof canopy which, except when the bed is in use, is on the outside and protects the bed against all kinds of weather. There is a second canopy filled with closely woven copper mesh screen. The copper wire mesh is not transparent as other screening. When the bed is occupied, the weatherproof canopy is thrown to the inside, protecting the room from the outside and conserving its heat, and the screened canopy is thrown to the outside. Between the two is a curtain or awning operated by cords from within the bed which gives protection against night showers and early morning sunshine.

A very simple exterior treatment is shown in the cut. Inside the room is seen the high casement sash and a seat with a paneled back under it, in the same finish as the rest of the room.



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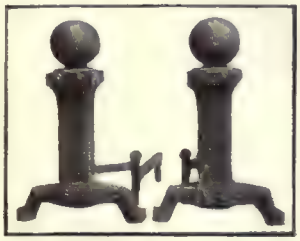
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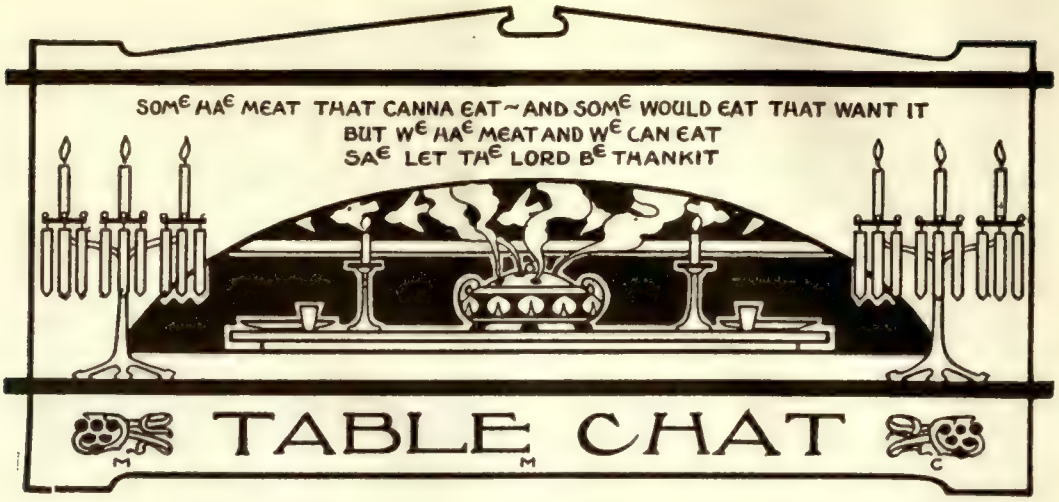
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The Christmas Message

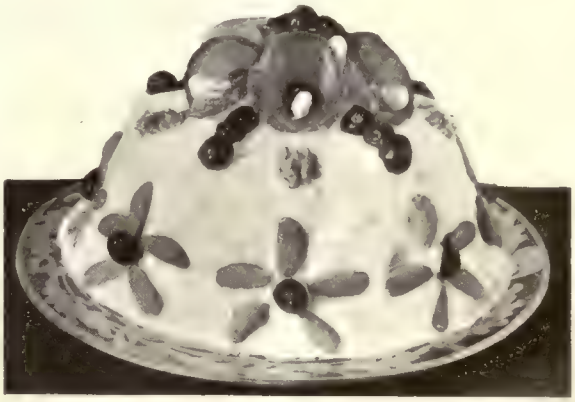
CHRISTMAS comes this year to an anxious and troubled world, to a world filled with war and the rumors of war, and its message of peace and good will is the more insistent that it is so opposed to the trend of events. But the greater the suffering and disaster of the world, the greater the need for all the gentle ministrations of love. And so I hope that all of us may feel at this Christmastide the impulse to do our uttermost, not only to make our own happy, but to bring some touch of Christmas cheer to those who would otherwise be outside all the joys of the day.

Every one of us can do something If we cannot send a dinner to a large, hungry family, we can see that some one woman, living alone, has her portion of delicate food, a card with our good wishes and a bit of Christmas greenery. Or we can see that some homeless man or boy has a substantial dinner at our expense.

When it comes to the matter of personal hospitality cannot many of us invite to our Christmas dinner someone who has either no friends to go to, or none accessible. The cities are full of such lonely men and women, and they are not wholly absent from country places. And their gratitude, while it may not be as loudly expressed as that of the washerwoman, is likely to be far more genuine.

And I should like to suggest, with such hospitality in mind, that dinner late in the afternoon breaks the day far better than the midday meal.

Your guest will feel that he or she must not outstay their welcome, and many sad ghosts walk in the twilight hours of Christmas Day, which are laid in the midst of laughter and good cheer.



Decorated with candied fruits and nuts.

The Christmas Table.

One reason, I fancy, why there is not more of the sort of hospitality of which I have spoken, is that the idea of giving is so bound up with Christmas Day. You cannot well make a present of any consequence to a stranger, you cannot leave him out when others are receiving gifts. You can solve the difficulty in one of two ways; you can have at each place a favor of some sort, a fern in a little pot, an individual dish of sweets or nuts, a tiny calendar, or some similar trifle; or you can have in the middle of the table a very small Christmas tree, with a wreath of holly at its base. Have on it a gift for each member of the party, all of exactly the same value. You can get any number of pretty trifles at the ten cent store. Wrap each in vivid scarlet wrapping paper, not crepe paper, but the glazed sort, and seal it with a Christmas seal. Then, either just before the dessert is brought in, or at the very end of the dinner, light the candles on the tree and distribute the gifts with a little ceremony. The scarlet packages and the candles will be quite enough decoration for the tree, and the difficult problem will be nicely solved, the family having had their gifts privately earlier in the day.

A Christmas Dinner Out of the Common.

With poultry high and still soaring, why not try an old fashioned English Christmas dinner of roast beef and plum pudding? Here is a menu, which may help someone:

Oysters on the half-shell
Roast beef Yorkshire pudding
Potatoes Braised onions Celery
Vegetable salad
Sauce tartare Baking powder biscuit
Plum pudding
Coffee Crackers
Cheese

With the oysters serve delicate sandwiches of brown bread and butter. Five to a person is enough to allow. In the centre of each plate set a cocktail glass, containing a mixture of tomato catsup, Worcestershire sauce and a single drop of tabasco sauce, laying the usual points of lemon between the shells.

For a large party you should buy three ribs of beef. If pater familias is not an expert carver, have the roast boned and



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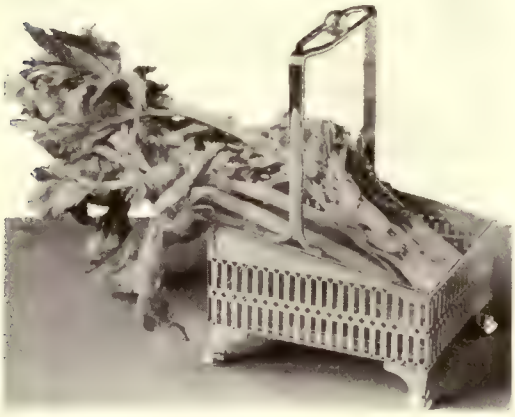
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rolled, as it is so much more easily managed.

Yorkshire pudding is not common with us, but it is extremely good, and very simple. To a pint of milk allow four tablespoonfuls of flour, a teaspoonful of baking powder and half a teaspoonful of salt and one egg. Half an hour before the roast is done, take it from the oven and put something across the top of the pan to



A celery basket.

support it and keep it from the bottom. Half of an old gridiron will answer, some skewers, or even three sticks. Replace the meat, pour the batter into the pan, right into the dripping, and let it bake brown but not scorch. Cut it into squares and arrange them around the meat on the platter. The potatoes must be mashed and well buttered, as you cannot have Yorkshire pudding and a made gravy.

The plum pudding should be sweetened with a mixture of the darkest brown sugar obtainable and syrup; it should be mixed so as to be rather soft when cooked, about the consistency of pound-cake, and only enough crumbs and flour should be used to hold the fruit together. Use twice the quantity of raisins that you do of currants and do not forget a little candied orange peel. Many a plum pudding has been spoiled for the lack of salt, and most of the rules give an absurdly large number of eggs. Three is quite enough for a large pudding, and it does no harm to add a teaspoonful of baking powder.

For the hard sauce cream two tablespoonfuls of butter, beat in two of powdered sugar, add a few drops of hot water, then more sugar, till it is stiff enough, beating it hard with a stiff spoon till it is white and creamy. Pile it in a glass dish and pour over it two tablespoonfuls of sherry or brandy.

In serving the pudding have it turned out onto a dinner plate and set this into a larger plate or chop dish, with a wreath of holly on it. If you wish to have it very picturesque, pour some brandy around the pudding and set it on fire just as it is brought to the table.

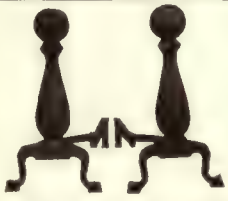
Preserved Ginger Cake.

A cake which is unusual, and is very good, is made with two eggs, five ounces of flour, a quarter of a pound of powdered sugar, a tablespoonful of milk, a teaspoonful of baking powder and a little bitter almond flavor, with the addition of two ounces of preserved ginger, carefully washed to remove the syrup. Bake it in a moderate oven and when cold, cover with white icing mixed with shreds of crystallized ginger, or decorate with candied fruit and nuts.

If there is any syrup left in the jar of ginger, the cake can be used for a pudding. Omit the icing and serve it hot. Bring a cupful of the syrup to the boil, thicken it with a teaspoonful of arrowroot, add a good lump of butter and pour it around the cake.

A Silver Celery Basket.

Celery is always awkward to serve. No dish is just right for it. The silver basket for celery is rather novel, and solves the problem nicely. It can also be used for olives or small pickles.



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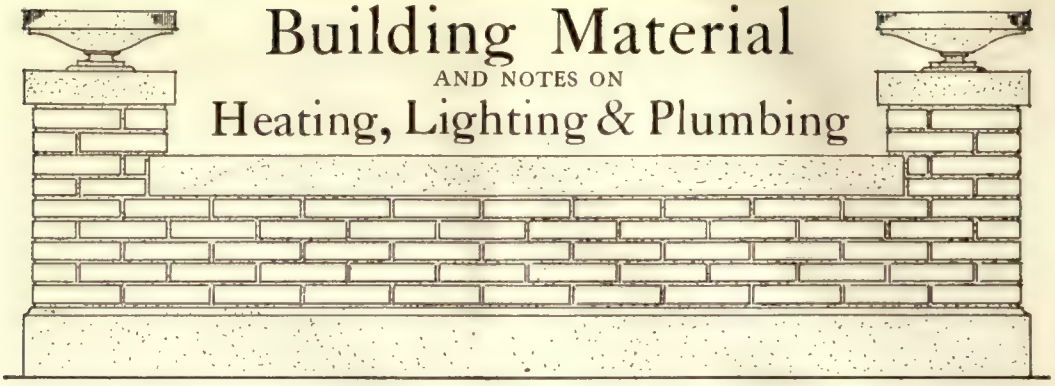
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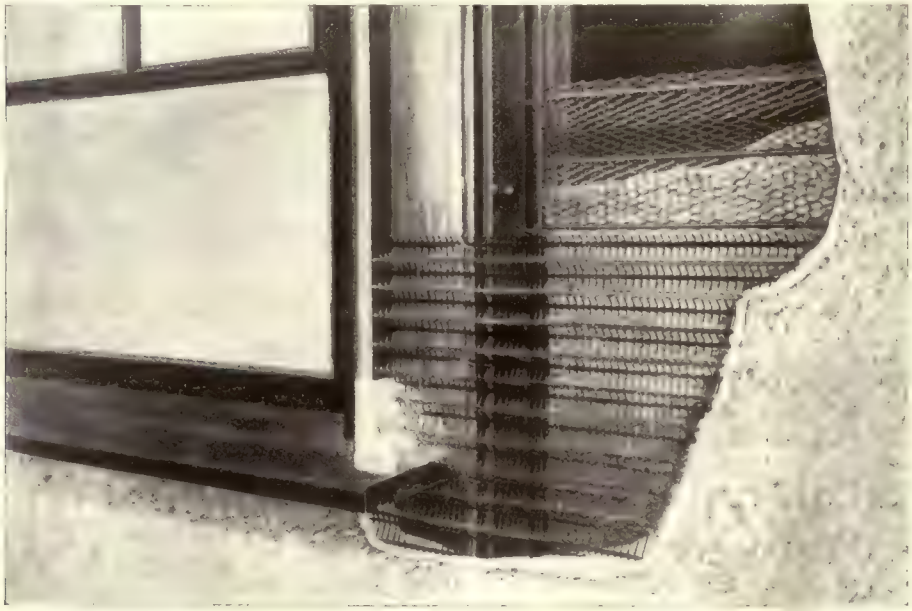
The Home Fireproof

A New Method of Building

A TYPE of steel and concrete construction which is entirely practicable for the small residence and yet which could be erected at a reasonable figure is a proposition which has just been developed. It is a problem on which much thought has been expended and which has now taken definite form, and the originators are now ready, as they say, to tell the building trade and those interested in home building how it may be done.

In order to put the matter in definite and practical shape two houses—a typical bungalow and a two-story, eight-room house—have been built, both of which claim to be absolutely fireproof. Since their completion these have been thrown open to the public for examination and inspection.

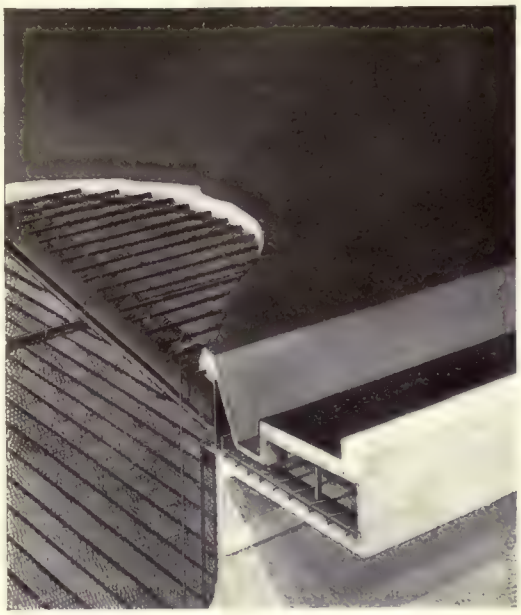
New building materials, a combined reinforcing and centering, and a deeply corrugated expanded steel sheet, a reinforcement which will hold in place two inches of concrete, have been developed to meet the needs of this construction.



Concrete removed from outside to show construction around window frame.

These are used over a steel framework not unlike a sky scraper construction, which is imbedded in the concrete foundations, and must be properly braced.

The foundations do not differ from the usual good, waterproof, concrete foundation walls, in which the steel frame work for the superstructure is set. The side walls consist of an outer two inches of reinforced, waterproofed concrete, and an inner three-quarters of an inch of reinforced concrete. The floors and ceilings are of the same reinforcement as the inner



Showing roof, suspended ceiling and gutter.

surface of the side walls. At their junction is an expanded metal angle which makes the bond complete between floor and ceilings and the wall. Heating and plumbing conduits are arranged for in setting walls and floors.

Side Wall.

The cut shows a bit of wall around a window showing the construction around the frame. A channel holds the window frame in place. The deeply corrugated reinforcement, trussit, as it is called, is wired to the steel frame of the structure. The scratch coat of cement plaster is first applied outside, then back plastered before the second coat is applied to the outside. The outside wall is made waterproof and given the finished coat, as with any kind of a stuccoed house. On the

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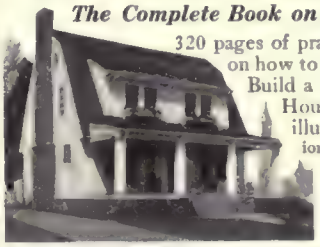
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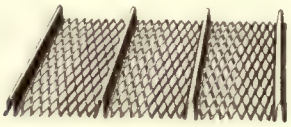
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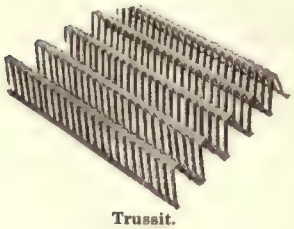
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inner side of the frame a self-centered reinforcement is also wired. A cut of these materials is shown elsewhere. That used on the inner wall, self-sentering, as it is called, has a heavy rib which gives it strength and rigidity, with a diamond mesh fabric affording a bond for the concrete and plaster.



Self-sentering.



Trussit.

Floors and Ceilings.

The floors are formed by two and a half inches of concrete laid on top of self-centering, over I-beams. Over the concrete is placed a non-combustible, sanitary composition flooring one-half inch in thickness, which is carried up to form a base about the room. Sleepers may be laid before the concrete is poured so that wood floors can be laid if desired. The ceilings are similar to the side wall.

Partitions.

The partitions are two inches of solid cement reinforcement. They are formed by wiring the deeply corrugated trussit to the self-centering of the ceiling and floors by means of a metal angle, before any cement has been put on, so that the surface is continuous. The trussit is then plastered on both sides to make a two-inch partition. Tests which have been made show that ordinary tones of voice can not be heard through such a partition; that it is perhaps less of a conductor of sound than the ordinary partition.

Roof.

A cut of the roof is also shown, giving details of the construction of the gutter. Two and a half inches of concrete over the reinforcement is protected by a waterproof compound, sufficiently elastic to take care of contraction and expansion and keeping a waterproof film over the concrete. The ceiling is suspended from the roof by hangers.

Stairway.

The stairway with this construction is of concrete and steel.

The concrete for the entire stairway may be poured at one time. The self-centering can then be back plastered.

The newel posts and railings are constructed of channels and metal lath. Posts are poured solid inside a metal lath form and plastered outside.

Interior Trim.

The small amount of trim required may be of wood or metal, fastened by screws. Details of this nature can be adapted by the builder without affecting the fireproof qualities of the structure.

Many adaptations of the construction are possible, both as to the materials used and as to the character of the structure. The house can be built with wood timbers framed together and thoroughly braced, and reinforced stucco for outside walls and cement plastered inside, with reinforced partitions and ceilings, concrete floors and roofs. Brick walls with metal lath inside walls, with the same interior, or stucco on hollow tile may be used for the outside walls.

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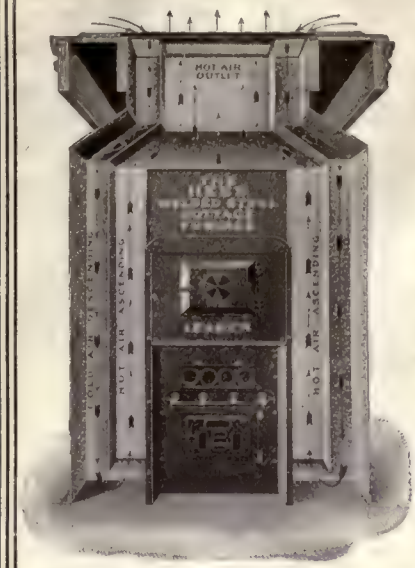
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WOODS AND HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

College of Forestry.

THE University of Washington offers students four distinct lines of work in its College of Forestry. This college, like any technical school, is for the purpose of giving to the industry things which can only be gained by an intensive study, and also to prepare men who are well fitted, after acquiring a practical knowledge, to take a place of value to the industry.

The courses presented at Seattle are: (1) Federal state forestry work; (2) logging engineering; (3) forest products, and (4) the lumber business. The latter is a new course and is being elected by a large per cent of the students.

The courses have recently been extended to cover five years. The first two years give the student a general training in mathematics, surveying, sciences, English, foreign language, and those elementary forestry subjects that are necessary in any line of forestry work. Students in each of the four groups take this first two years of general training and devote the last three years to specialization in the line that they select.

Opportunities along a great many lines are open to graduates of the third group, such as wood preservation, wood pulp manufacture, veneer and furniture manufacture, wood pipe construction, inspection of wood products (especially structural materials), and numerous other branches of work concerning the lesser wood-using industries.

In addition to the regular course a short course is offered each year, beginning immediately after the Christmas holidays and continuing for twelve weeks. This course is arranged to meet the special needs of men engaged in forest service work, timberland owners and lumbermen engaged in woods work. The course is divided into two groups, (1) the ranger group, and (2) the lumberman's group.

At Syracuse.

The New York State College of Forestry at Syracuse opened this year with a registration of 274 men, who are taking the four and five year professional courses in forestry. In addition to these men there are eighteen who are taking the one year practical course at the State Ranger School at Wanakena.

The professor of forestry utilization, Nelson C. Brown, made a 6,000-mile trip during the summer, visiting lumbermen and loggers in the Pacific northwest, where he studied methods of utilizing and protecting timber in practically all of the timber states of the west, bringing back illustrative material for use in the school and for the forest museum.

Yale Post Graduate Work.

The Yale students of forestry went down into the Vredenburgh timber holdings at Vredenburgh, Alabama, for their post graduate course in forestry engineering. The conditions are considered very favorable for student work. There are about 30,000 acres of timberland in these holdings so situated as to give the stu-

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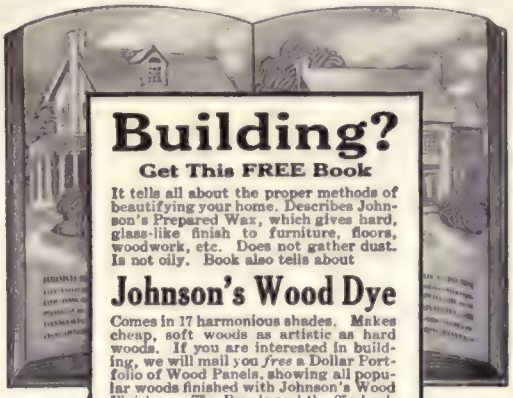
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dents excellent opportunities to make their studies and investigations under the most favorable conditions. The manufacturing plant has a daily output of 100,000 feet and the climatic conditions in that section are especially favorable to the out-door work of the class.

Professor R. C. Bryant is in charge of the forestry school at Yale, and made a personal visit before selecting the location for the class work. The special course consists of estimating timber, studying logging conditions, milling conditions, and in general, the working conditions of the industry.

Wall Paper a By-Product from Waste Bark.

The effort to find a use for by-products which otherwise are waste materials seems to have achieved another success in the manufacture of a wall covering not unlike the "oat-meal" wall papers now in use.

The sample made at the laboratory is a beautiful brown, slightly touched with the tiny stray filmets of white. The paper possesses a stiffness which would make handling easy, and altogether seems to be a most successful development.

A valuable property of this paper is that little dye is required to produce the proper tints. This is especially valuable at the present time when dyes are almost impossible to obtain, and if at all only in small quantities and at exceedingly high prices.

Bark which is removed from the logs at certain pulp mills at Oshkosh, Wis., is of no value for fuel, and as it pollutes the water it cannot be thrown into lakes and streams. Great quantities accumulate at the mills or must be disposed of at a considerable cost, and hence it is an economic waste.

A quantity of spruce bark was recently sent to the Forest Products Laboratory in Madison for tests as to its possible usefulness. Here it was ground and made unto what closely resembles the "oatmeal" papers. Samples sent to paper dealers and manufacturers have aroused considerable interest and it seems possible that this bark which now is only a source of expense may be utilized in the manufacture of a satisfactory commercial product.

Rosewood.

Like the aristocrat it is among fine woods, Rosewood has many claimants to relationship from the East Indies and other tropical localities—woods similar in character but inferior in appearance. The true Rosewood, however—deep, ruddy brown in color and richly figured with black resinous layers—hails from Brazil, the Rio de Janeiro and Bahia Provinces. In this wood color is the factor which determines its grade and costliness.

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Rosewood owes its beauty of figure to a resinous oil which is present to a degree very unusual in a hardwood—a constituent which makes the wood not only very hard to work, but which presents finishing difficulties as well. This resinous oil is prone to ooze or bleed and this fact must be dealt with in finishing the wood.

To Study Forest Problems.

Secretary Houston of the Department of Agriculture made an extensive tour of the national forests to find out for himself to what extent their timber, forage, water power, recreational and agricultural resources are being developed for the public under present methods and to make a study of the administrative problems of the forest service. He sought first-hand impressions of the conditions under which the forest service is working.

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SPLINTERS AND SHAVINGS

Careless Use of Electric Devices.



HEN electric devices or appliances for household use are installed, it should be done under the supervision of some one who understands the installation, if it is not done by an expert. A warning has been issued to the public by a state fire marshal, against carelessness in the installation and the use of these appliances, as their abuse may cause more or less disastrous fires. He especially calls attention to the fact that the electric circuit should not be overloaded with irons, toasters, plate warmers, hair curlers, sewing and washing machines. Most of the fires occur not because of the use of these devices, but because when the current on the wire is increased there is added danger of melting the connections and starting a fire which is not discovered until it has made a good start in the woodwork.

Many fires are started from leaving electric irons standing upon the ironing board without turning off the current. A hair curler carelessly left upon a dresser for a few seconds may be sufficient to start a blaze, and a washing machine may be made dangerous if the wire connecting the plug with the main circuit is allowed to touch the metal, thus burning out the connection.

In one case an improperly installed electric plate warmer started a fire. Another report showed that an electric iron caused a disastrous blaze. The fire department does not complain of these devices themselves, as they are properly constructed and are an excellent means of reducing household drudgery, but in each case they should be installed by an expert, or at least more care should be used by the head of the household who does his own installing.

A recent tabulation of electrical appliances in household use at the present time gives a total of nearly six and a half million, with perhaps two million more which are not tabulated. Of the six and a half million devices tabulated, over three millions are flatirons, easily leading the lists, with a little more than a million and a half electric fans taking second place. Vacuum cleaners and toasters are next on the list with between four and five hundred thousand in use. Over fourteen thousand electric ranges are in use according to this list, and at the end of the list comes electric dish washers, two hundred sixty-one in number.

Percentage of Home Owners.

In Seattle and Los Angeles forty-four per cent of the people own the houses they live in. In Philadelphia, Chicago and Saint Louis the percentage is approximately twenty-six. In Boston it is seventeen, in New York twelve.

"The Mystery of the Oriental Rug," by Dr. G. Griffin Lewis, is a monograph, including "The Prayer Rug" and "Some Advice to Purchasers of Oriental Rugs," published by the J. B. Lippincott Company, Philadelphia. The book has been published in response to the popular demand for a low-priced book on the subject. In this monograph the author has endeavored to present in a concise form certain facts that may enable the novice to more fully understand and appreciate the beauty and interest attached to these treasures of the Orient.

The second edition of "The Practical Book of Oriental Rugs," by Dr. G. Griffin Lewis, published by the J. B. Lippincott Company, Philadelphia, has appeared. This is a very complete and comprehensive survey of the subject, with many illustrations, twenty of which are in color. This book gives quite a complete classification, both from a geographical standpoint, as most rugs are named after the towns or districts in which they are made, or from the people who make them; and also a classification according to their intended uses. The chapter on identification of rugs, together with the chart showing the distinguishing features of the different rugs is of particular value. The information on the prominent characteristics and details of weaving, the detailed chapter on design, illustrated throughout with text cuts, thus enabling the reader to identify the different varieties by their patterns; and the price per square foot at which each variety is held by retail dealers, are features new in rug literature.

The book is full of interest and invaluable as a reference.

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Keith's magazine on home building

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